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**THE OFFICE FOR THE
GREATER TORONTO AREA**

**THE OUTLOOK FOR POPULATION
AND EMPLOYMENT IN THE GTA**

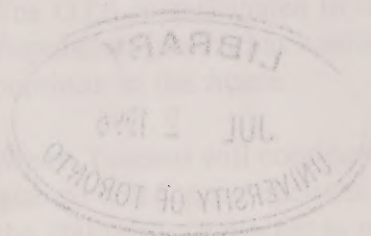


**Hemson Consulting Ltd.
The Coopers & Lybrand Consulting Group**

August 1993

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GREATER TORONTO AREA**

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AND EMPLOYMENT IN THE GTA**



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The Coopers & Lybrand Consulting Group**

August 1993



AXH 9268

August 11, 1993

Ms. Sylvia Davis
Chair, Population and Employment Sub-Committee
Greater Toronto Co-ordinating Committee
10 Bay Street, Suite 300
Toronto, Ontario
M5J 2R8

Dear Ms. Davis:

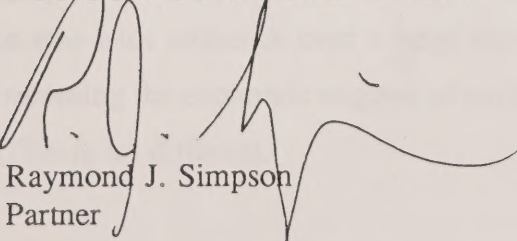
Attached is the report *The Outlook for Population and Employment in the GTA*. Like most forecasts this report will be subject to much debate regarding specific assumptions and forecast results. However, it is critical in this debate that three important conclusions not be forgotten:

1. The GTA is anticipated to continue to experience a great deal of growth. Population growth has continued during the recession and is anticipated to continue in the future.
2. Metro Toronto will continue to experience growth. The magnitude of this growth will depend upon the success of housing intensification policies and the ability of the market to recycle now-obsolete employment lands. Even with highly successful policies Metro Toronto will only be able to accommodate a portion of the anticipated GTA growth.
3. The largest portion of the population and employment growth will occur in the four GTA Regions surrounding Metro Toronto.

The consulting team would like to thank you, your staff the committee members and the GTA Regional Planning Commissioners for taking part in this assignment.

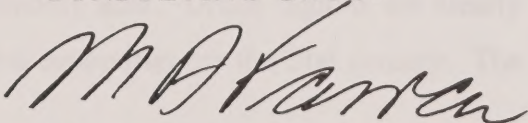
Yours truly,

HEMSON CONSULTING LTD.



Raymond J. Simpson
Partner


**THE COOPERS & LYBRAND
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Maureen A. Farrow
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The Coopers & Lybrand Consulting Group



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EXECUTIVE SUMMARY

Forecasting future population and employment levels for the Greater Toronto Area (GTA) is particularly challenging. The GTA like most parts of the developed world is facing numerous changes including: the rapid change of global alliances; the emergence of new trading blocks; the movement away from an inflation-driven economy; the restructuring of economic activity; and fundamental shifts in demographics and patterns of human settlement. Recently, Canada and the GTA have technically emerged from a cyclical recession, but the ongoing restructuring of both the private and public sector has created an environment in which the economic future of the GTA and Canada is not clear. As a result, there is much scepticism about forecasts indicating growth.

History has generally shown that forecasts prepared during periods of extreme pessimism understate future growth. The approach used in the preparation of this forecast takes a longer-term perspective and focuses on the identification of long-term social, economic and demographic trends. These trends are tempered in the short term by the realities of the current economic environment.

The GTA is anticipated to grow considerably in the future primarily because the GTA is a major urban system that continues to attract migrants. Almost all parts of the developed world are experiencing a decline in the rate of natural population growth, with expansion in urban regions increasingly driven by migration. These urban regions are becoming functionally and physically larger in size with influence over a large surrounding area. Urban regions are clearly becoming the economic engines of national economies for the 21st century. The GTA is no different.

The main conclusions of the report can be summarized as follows:

1. **The GTA Is Well-Positioned To Participate In The Knowledge-Based Economy Of The 21st Century**

The early years of the 1990s have seen the GTA severely affected by the recession and massive restructuring as corporations fight to position themselves in the global marketplace. The GTA has seen a contraction in traditional manufacturing and some service sectors. As the recovery takes hold, the strength of the GTA economy will emerge focused on the knowledge-intensive sectors. The GTA is well-positioned to base future growth on these fast growing high-value-added sectors, such as telecommunications, pharmaceuticals, business and computer services, and finance. Even during the recession, these sectors have been creating jobs. The GTA already is one of North America's strongest locations for these sectors with the Toronto region being Canada's centre for finance, education, medicine, telecommunications, computer software, and business services. The GTA is one of Canada's gateways to the North American trading region and the challenge to the GTA is to position itself to benefit from these advantages.

2. **Forecast Methodology Concentrates On A Number Of Key Variables**

The GTA is a single economic region so the forecast methodology for the GTA population follows a top-down cohort survival model. Each of the input variables was assessed against the larger context of economic, social and demographic change in the GTA, Canada and the world. The most sensitive input variable to forecast the future population is migration. To determine future levels of migration efforts were focused on assessing the ability of the GTA to create jobs and hence be an attractive location for migrants and the policy stance of the Canadian government regarding immigration. The employment forecast examines the current structure of employment within the GTA and assesses the ability of the region to complete the current economic restructuring and create new jobs in the knowledge intensive-sectors. The job creation scenarios were translated into the key forecast input variables of labour force participation rates and unemployment rates.

After the total population and employment for the GTA is forecast the growth is distributed to the regions within the GTA. This is accomplished for population by forecasting future housing requirements by unit type.

Next, based upon current and anticipated market shares, the housing is distributed to the regions and, by applying average household size, a regional population is produced. The employment was distributed to the parts of the GTA by forecasting future employment growth in three major categories: major office; population-related; and employment lands. Share distributions of each of these categories to the regions were determined based upon current shares, anticipated population growth in each part of the GTA and anticipated shifts in market shares due to land supply constraints.

3. Range Of Forecasts Based On A Range Of Economic Outlooks

In order to cover a full range of forecast possibilities three forecasts are presented: Reference, Low and High. The Reference Forecast assumes that between 1991 and 1996 a difficult economic environment will continue and that following 1996 the economy once again enters a cyclical expansion with the economic restructuring fully completed by the end of the decade. The Reference Forecast reflects an economic region that provides adequate employment opportunities over the long term but with a more restrictive immigration policy than currently in effect. The Reference Forecast has been highlighted in the report.

The Low Forecast reflects a much more restrictive immigration policy nationally, and a region that is unable or unwilling to respond adequately to changing economic times and thus provides fewer employment opportunities. The High Forecast reflects a Canadian nation that continues to have an open immigration policy to help stabilize population and labour force conditions and a region that continues to demonstrate the ability to maintain the high quality of life and employment opportunities that have attracted so many migrants in the past.

4. The GTA Will Continue To Experience Strong Population Growth But At A Slower Rate Than In The Past

In the Reference Forecast, the population of the GTA is anticipated to rise from the 1991 level of 4.2 million to 6.7 million people by the year 2021. This growth level represents an annual rate of population growth of 1.5 per cent for the next 30 years, down from the 2.3 per cent annual growth experienced over the 30 year period 1961 to 1991. In contrast, many other areas of Ontario and Canada will experience virtually no population growth in the period to 2001. After 2001, population decline will commence in many parts of the country.

As in the past, a large proportion of population growth is expected to result from migration to the GTA. While the absolute number of migrants is forecast to remain around current levels, the rate of migration will be significantly lower than that experienced over the last 30 years.

Total employment in the GTA is forecast to rise from the 1991 level of 2.3 million to 3.8 million by 2021. Of this 1.5 million growth over 30 years, 40 per cent is anticipated during the first ten years of the forecast. This concentration of growth early in the period is primarily the result of the age structure of the existing population. During the short term, the core rate of unemployment is anticipated to remain high due to a continuation of the economic restructuring. Like the forecast population, the rate of employment growth will decline significantly throughout the forecast period and will be well below levels that have been experienced in the past.

5. Forecast Range Could Produce A GTA Population Of 5.8 to 7.7 Million By 2021

The range of forecasts were prepared at the GTA level in order to place outside parameters on the Reference Forecast. These ranges reflect different economic outlooks for the GTA which would influence key forecast assumptions such as migration, labour force participation and unemployment rates. These parameters are useful for consideration of the consequences of planning for too low or too high a growth figure.

FORECAST POPULATION AND EMPLOYMENT RANGE (millions)				
	1991	2021		
		Low	Reference	High
Population	4.2	5.8	6.7	7.7
Employment	2.3	3.1	3.8	4.4

6. Appropriate Use Of Forecast Ranges And Horizon Years Depends On The Intended Application Of The Forecast

The range of forecasts for 10, 20, 30 and 40 year periods, 2001 to 2031, are provided in order to satisfy the time horizons for various planning requirements. For example, the use of the first 20 years of the Reference Forecast would be suitable in most circumstances for the designation of

urban land. However, the long-term strategic level of planning required for major infrastructure would likely rely on a 40 year time frame. In this case the High Forecast should be utilized to preserve options for the future, not to justify specific infrastructure projects 40 years out. Preservation of options includes the careful consideration of over-sizing of infrastructure and the protection of key service corridors. For this purpose, selection of the High Forecast may be the most appropriate to ensure that the widest possible range of options are protected. On the other hand, the Low Forecast may be suited to financial analysis in order to understand the financial risks if the higher levels of growth do not occur.

7. Most Of The Growth Will Occur In The Regions Outside Metro Toronto

In the next 30 years, over 90 per cent of the population growth anticipated in the GTA Reference Forecast is likely to occur in the four Regions. This growth pattern is primarily a result of households migrating to the Regions to occupy new ground-related housing. Metro will still, however, experience significant housing growth, about 17 per cent of GTA housing growth, but this does not translate directly into population growth because the average household size in existing units will continue to decline.

POPULATION RANGE (000s)				
Region	1991	2021		
		Low	Reference	High
Metropolitan Toronto	2,280	2,270	2,410	2,570
Peel	730	1,120	1,320	1,540
York	500	1,040	1,290	1,570
Durham	410	780	970	1,180
Halton	310	550	670	820

A similar pattern will hold true for employment with a continuation of the pattern that has been evolving in the GTA over the last two decades. As the population base in the four Regions increases, growth in employment follows both to serve the resident population and to take advantage of the expanding labour force. Like the land supply for ground-related housing which attracts the population, supplies of suitable development land for new employment areas is also highly concentrated in the four Regions.

EMPLOYMENT RANGE (000s)				
Region	1991	2021		
		Low	Reference	High
Metropolitan Toronto	1,370	1,500	1,600	1,720
Peel	380	590	740	900
York	250	490	660	840
Durham	160	300	400	500
Halton	140	270	360	460

8. Alternative Regional Distribution Of The GTA Population And Employment Were Examined

The Reference Forecast population and employment distribution among Metro and the four Regions is based upon a level of planning policy intervention greater than that which exists today. These policies represent the implementation of current efforts to encourage housing and employment intensification in the GTA. This would primarily have the effect of raising Metropolitan Toronto's anticipated share of population and employment growth.

In addition to this Reference distribution scenario, two other distribution scenarios were prepared. Scenario 1 reflects a much more aggressive policy environment resulting in more significant intensification and, therefore, population and employment growth, in Metro than in the Reference Forecast.

GTA 2021 POPULATION AND EMPLOYMENT BY REGION - SCENARIO ONE (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
Population - 2021	2,700	1,260	1,110	950	650	6,670
Employment - 2021	1,800	690	580	370	330	3,760

Scenario 2, based upon observed patterns in other major cities in the developed world, indicates a continuation of current trends including the existing level of planning policy intervention in directing growth among Metro and the four Regions.

9. Regional Growth Pattern Creates Numerous Opportunities To Alter Community Development Patterns

This forecast does not imply that there will be a continuation of the current form of urban development that has been strongly criticized in recent years. In the short-term (ten years), existing development commitments will make *major shifts* from recent patterns difficult. However, all communities within the GTA can choose development policies to accommodate growth in patterns different from those of the past. Communities can be developed that address current concerns regarding distinct edges, centres, sense of community, major open space systems, better live/work relationships and land use patterns that are more supportive of transit. Development could be focused around nodes and concentrated along mainstreets. Intensification will continue to occur throughout the GTA, as a natural part of the evolution of urban settlements.

It is in directing community form where land use planning has proven to be much more effective as a policy implementation instrument than in attempts to redirect the larger scale growth patterns which are driven by broad demographic, cultural, social and economic forces. The key is for communities in the GTA to start planning in an environment of acceptance of the growth realities and to think about the kinds of communities we desire to build.

In light of the considerable amount of total GTA population and employment growth and the decentralization of that growth anticipated in the future, there is a need for a more strategic view of development plans and patterns in the GTA. Global forces are influencing GTA functions and relationships requiring new and innovative directions. These forecasts provide the overall context in which meaningful policy and planning decisions can be made.

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I INTRODUCTION

In 1989, the Office for the Greater Toronto Area embarked upon a process of determining what level of population and employment growth could be anticipated in the Greater Toronto Area (GTA) over the next 30 to 40 years. At that time the Greater Toronto Co-ordinating Committee made the commitment to revisit these forecasts once the 1991 Census data became available. This report is the result of that commitment.

The 1991 Census and subsequent information indicate that the GTA population is growing faster than originally anticipated, even during the worst economic slow-down since the 1930s. The 1991 Census also confirms that Toronto exhibits the growth pattern of most large cities in the world, with the majority of growth occurring at the edges (the Regions surrounding Metro) and the centre (downtown Toronto). The recent recession has had a devastating impact on employment as a result of an accelerated pace of economic restructuring. The crash that has occurred in real estate, following a frenzied period of over-building, has further added to a sense of uncertainty about the future.

Against this background of rapid change, this assignment was initiated to update the outlook for the GTA in terms of growth for population, employment and housing. Hemson Consulting Ltd. and The Coopers & Lybrand Consulting Group were retained by the Population and Employment Sub-Committee of the Greater Toronto Coordinating Committee (GTCC) to prepare a revised population and employment forecast for the period 1991 to 2031. Emphasis was to be placed on the first 30 years which is the planning period for the GTA. The resulting forecasts are to be used for planning purposes by all levels of government.

A. THE FORECASTS ARE NEEDED FOR PLANNING PURPOSES

Population and employment growth forecasts are required for the GTA in order to assess the needs of the future. First, a need clearly exists to reach consensus in the GTA on a number of key decisions regarding long-term infrastructure such as: water and sewer systems; major greenbelts; and intra-regional transportation facilities.

Secondly, regional and local planning work is being undertaken in the absence of a GTA framework within which to consider local development aspirations. It is clear that municipal land use planning issues are becoming increasingly inter-related, with growth in one part of the GTA having implications for other areas. Communities are unable to properly consider their own prospects in the absence of this GTA context. Thirdly, there is a need to have a growth context in which to evaluate the spatial implications of other types of policy initiatives.

To meet the planning needs, a range of forecasts for a 30 to 40 year period, 1991 to 2031, are provided in order to facilitate the time frameworks of various planning requirements. For example, the use of the first 20 years of the Reference Forecast would be suitable in most circumstances for the designation of urban land. However, the long-term strategic level of planning required for major infrastructure would likely make use of the 40 year time frame. In this case the forecast should be utilized to preserve options for the future, not to justify specific infrastructure projects 40 years out. Preservation of options includes the careful consideration of over-sizing of infrastructure and the reservation of key service corridors. For this purpose, selection of the High Forecast may be the most appropriate to ensure that the widest possible range of options is protected.

B. FORECASTS PREPARED IN AN ECONOMIC, SOCIAL AND DEMOGRAPHIC CONTEXT

The forecasts were prepared in the larger context of economic, social and demographic change within the GTA, Canada and the world. Recent trends in population, employment and housing were reviewed as a starting point. Next, the driving factors behind the changing economic environment were identified, as well as the implications of these factors on the growth prospects for the GTA.

Against this background, the forecast is prepared using available 1991 Census information as a starting point.¹ Key assumptions for the forecast model are based upon the economic outlook. The forecast technique is shown graphically in Exhibit 1 and briefly consists of the following key elements:

- The forecast process begins with a population forecast at the GTA level. This is a "standard cohort survival" model with inputs of fertility, mortality and migration. The migration input is most sensitive and is based on the economic and employment outlook as well as federal government policy.
- The next steps represent a method of determining the distribution (internal migration) of population within the GTA. This internal migration is determined using a household-based and housing-based model:
 - GTA forecast population is translated into forecast households by applying age-specific headship rates, i.e. the rate at which people form households.
 - Total number of households are projected into forecast housing units by type through the application of age-specific occupancy patterns.

¹ The 1991 Census of population has been used. At this time it is not possible to alter the historic data to reflect the 1991 Census redefinition of the Census population. No adjustment has been made to the 1991 Census counts to reflect the under-count in the base year of the projection. Adjusted population counts for sub-provincial areas are not expected to be available before late fall 1993.

- The housing units are distributed to the regional market areas of the GTA by using market shares, where the market share for a given area is based on historic market patterns, land supply and planning policy.
- The housing units thus determined for each region are converted back into population by applying an average household size.

The result is a forecast of households, housing by type and population for each of the regions in the GTA.

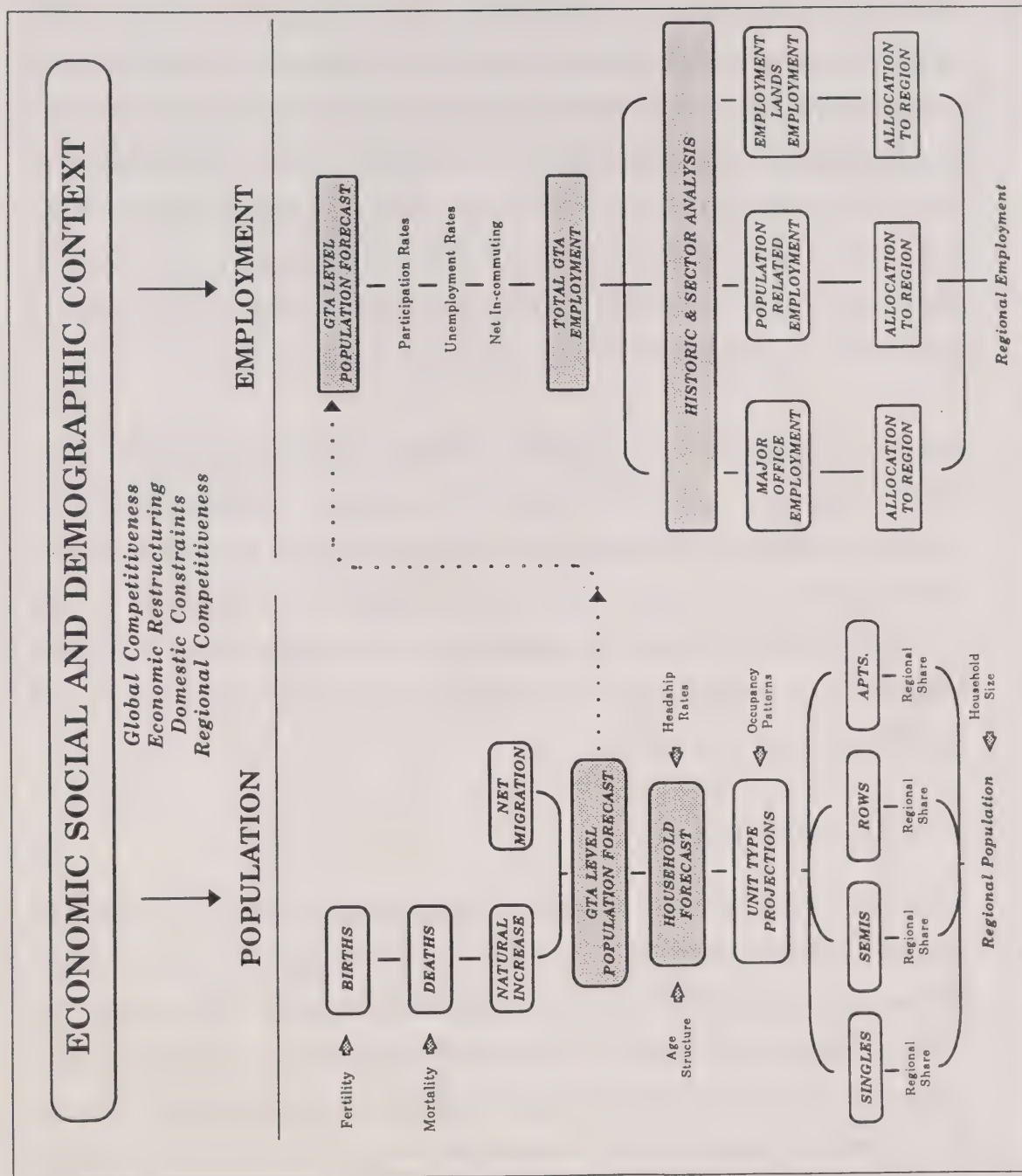
- The employment forecast is generated separately from the population forecast and then compared to the labour force numbers originating from the population forecast to assess reasonableness. This is then followed by a recalculation of both the population and employment forecasts. The employment forecast is based on an assessment of the current structure of employment within the GTA's key sectors. The labour force based employment forecast arising from the population forecast is prepared as follows:
 - Initially the total GTA labour force is determined by applying age-specific participation rates to the population.
 - The labour force is transformed into the employed labour force by applying an unemployment rate assumption.
 - The addition of net "in-commuting" to the employed labour force yields total employment.
- For the purposes of distributing the employment to the regions of the GTA, the employment is divided into three categories of employment: Major Office, Population-Related, and Employment Lands. Allocation to these categories is based on the restructuring trends identified in the sectoral analysis.

The employment in each of these three categories is then distributed to the regions using forecast shares of growth. Growth shares include the analysis of the each region's employment prospects and an examination of their ability to restructure and achieve job growth within the knowledge-based sectors. The sum of the employment in each of the three categories in each region, provides the total employment in each region.

LONG TERM FORECAST METHODOLOGY

5

EXHIBIT 1



Using the same method, but varying the forecast assumptions, three sets of forecasts are presented: Reference, Low and High. Throughout the report the Reference Forecast is featured; it represents the best gauge of the future growth and structure of the GTA that the consulting team feels can be anticipated. The High Forecast reflects a Canadian nation that continues to have an open immigration policy to help stabilize population and labour force conditions and a region that continues to demonstrate the ability to maintain the high quality of life and employment opportunities that have attracted so many migrants in the past. The Low Forecast assumes a more restrictive immigration policy nationally, and a region that is unwilling or unable to respond adequately to changing economic times and provides fewer employment opportunities.

The GTCC Population and Employment Sub-Committee played an active role in this assignment. In the initial stages of the process a seminar was held for committee members and Regional and Provincial officials to establish a common knowledge base. Subsequently, the consultants established a continuous process of reporting to the committee. At each stage the assumptions were reviewed, the implications of the assumptions were considered, the results were discussed, and general agreement was reached.

C. REPORT OUTLINE

The report begins with a discussion of recent trends in the GTA in terms of population, housing activity and employment. Following this, the external forces that are affecting growth in the GTA are discussed including: the position of the GTA in the global marketplace; the changing workplace; and the implications of population age structure and evolving development patterns in the GTA. Chapter IV presents the population and employment forecasts for the GTA. This is followed by a discussion of the growth outlook for the GTA Hinterland. Forecast

ranges for the GTA and the Hinterland are presented in Chapter VI. Chapter VII discusses where in the GTA the growth is likely to be accommodated. The report concludes with a discussion of the implications of alternative regional growth distributions on the population and employment forecasts at the regional level. This report, where necessary, briefly discusses the methodology and assumptions underlying the forecasts. A comprehensive description of the methodology and detailed results of the forecast are provided in a technical appendix produced under separate cover.

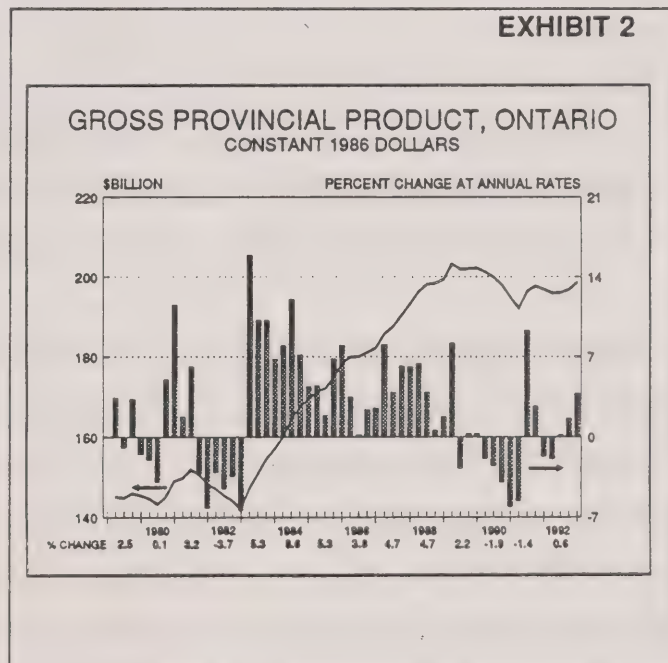
II RECENT TRENDS IN POPULATION, EMPLOYMENT AND HOUSING

The recession that began in early 1990 has been technically over for almost a year, according to the economic data. However, the combination of structural change and the reluctance of employers to hire has to-date meant a "jobless" recovery and continuing low levels of public confidence. Despite a weak employment environment in the GTA in recent years, the population continues to grow rapidly. New housing activity, although well below the "boom" conditions of the late 1980s, also continues to improve modestly.

A. ECONOMIC RECESSION IS OVER BUT RESTRUCTURING CONTINUES

The cyclical recession is over, (Exhibit 2) but the restructuring of the GTA economy continues. The recovery that is underway is based upon an increase in exports, and to date, not on consumer spending. Massive restructuring has occurred, and continues to occur, as businesses are forced to address the need to be competitive. The impact of this restructuring on employment has been severe.

Through the late 1980s, Ontario reasserted its traditional status as the



wealthiest of the provinces. The manufacturing and financial service industries of southern Ontario, and particularly the GTA, recovered quickly from the 1982 recession. By mid-decade, boom conditions had clearly returned to central Ontario. This drew migrants from less prosperous regions of the country to the GTA. The boom began to run out of steam by late 1989 as manufacturing activity began to slow down. By mid-1990, the service sector was also feeling the effects of the economic downturn. Real estate and construction activity entered a steep slump as the overheated housing and commercial property markets of the GTA and adjacent regions collapsed. The result was that economic activity declined through 1990 and 1991, with only modest growth in 1992. This collapse in the economy resulted in a sharp increase in the GTA's unemployment rate from an average of 4.0 per cent in 1989 to an average of 11.4 per cent in 1992. For the second quarter of 1993 the unemployment rate remains at 11.3 per cent.

The situation continues to be complicated by the massive restructuring that is occurring in Southern Ontario. Even before the recession, the economy of the GTA and Southern Ontario was fundamentally changing from being centred on the goods-producing sectors to the service-related sectors. The table below highlights these changes from 1986 to 1992 for the economic region centred on the GTA. This table shows that the percentage of the labour force engaged in manufacturing has declined while service sector employment has grown. To some extent, this pattern reflects automation and productivity gains in key manufacturing sectors.

The restructuring of the economy accelerated during the recession as corporations were forced to streamline and downsize to stay competitive in the marketplace. The impact of the restructuring has been to complicate, deepen, and even prolong the cyclical recession. It also means that many jobs that have been lost (about 200,000 in the GTA during this recession) have been lost permanently. It is widely recognized that the competitive restructuring that is currently taking place will continue for several more years.

EMPLOYMENT BY INDUSTRY, ECONOMIC REGION 530			
	1986	1992	Compound Annual Rate of Change, 1986 to 1992
	Percentage Share		Per Cent
Agriculture	0.7	0.6	-1.3
Manufacturing	24.3	18.7	-4.2
Construction	5.7	5.0	-2.1
Transportation, Communication & Other Utilities	7.7	7.6	-0.3
Trade	17.1	17.0	-0.1
Finance, Insurance & Real Estate	8.4	9.7	2.5
Service	31.2	36.1	2.5
Public Administration	4.9	5.3	1.2
All Industries	100.0	100.0	0.0

Economic Region 530 is the GTA excluding the City of Burlington.

Source: Statistics Canada, Labour Force Annual Averages, Cat No. 71-220 and the Household Surveys Division, Labour Force Survey for 1986

The result is that, as the recovery takes hold, manufacturing industries will not follow the same recovery path experienced between 1983 and 1989 following the 1981-82 recession, but will more likely see continuing employment contraction and downsizing as they seek growth through productivity improvements.

Growth in employment will come from the new knowledge-intensive sectors on which the new economy of the GTA will be built. Although the unemployment picture still shows a weakened economy, the recovery is underway. The engine of growth to-date has largely been U.S. demand for Ontario exports and not increased consumer spending. The domestic economy, especially those sectors that are consumer-driven, has been slow to create jobs. Compared to previous recoveries, this economic expansion will be characterized as "jobless" with rates

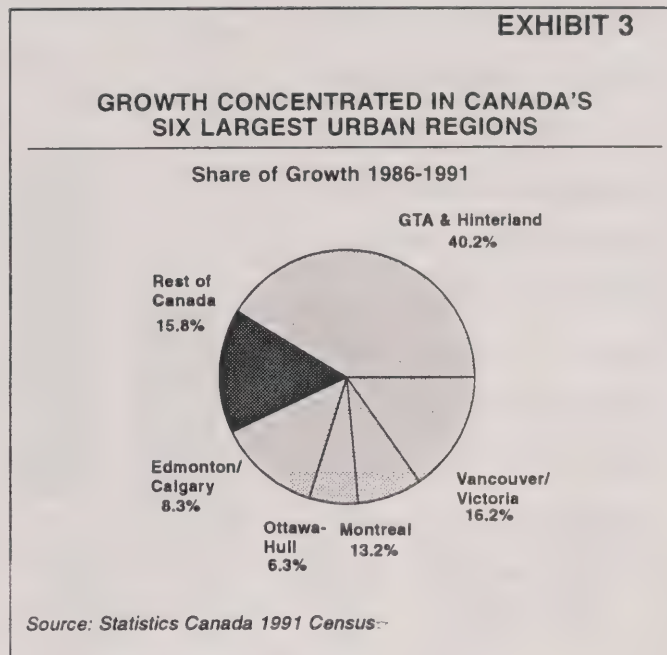
of employment growth well below those of other recoveries. It is not anticipated that the unemployment rate will return to pre-recession levels much before 1995 or 1996.

Also, feeding public perception that the recession is still upon us is the visible evidence of vacant commercial real estate, which is primarily the result of the massive over-building that took place in the 1980s. It will take many years to correct this over-supply. The significant decline in the value of residential real estate has also contributed to the public scepticism about the improving economic situation. But at mid-1993 the economy is beginning to expand and jobs are being created, primarily in the knowledge-intensive sectors, and this pattern can be expected to continue.

B. POPULATION GROWTH HAS CONTINUED IN SPITE OF THE RECESSION

Available evidence suggests that high levels of population growth are continuing in spite of the recession and economic restructuring. The GTA is currently estimated to be growing at about 100,000 new residents annually. This level of increase is occurring for two reasons. First, the level of migration to the GTA has remained at high levels. In previous recessions levels of migration have tended to fall with economic activity. The source of current migration is mostly foreign. Migration from this source is more dependent upon federal government policy than on short term economic conditions. Secondly, a large number of children continue to be born. In 1992, more babies were born in Ontario than during any year since the early 1960s reflecting the "baby boom echo" effect.

Many regions of Canada are experiencing slow rates of population growth or modest declines as a result of low levels of fertility, continued out-migration, and an aging population. However, the GTA and its Hinterland² along with a number of other major centres in Canada have shown strong growth (Exhibit 3). While the six largest urban regions in Canada accounted for about 58 per cent of the national population in 1991, they accounted for over 85 per cent of the growth during the 1986-1991 census period.

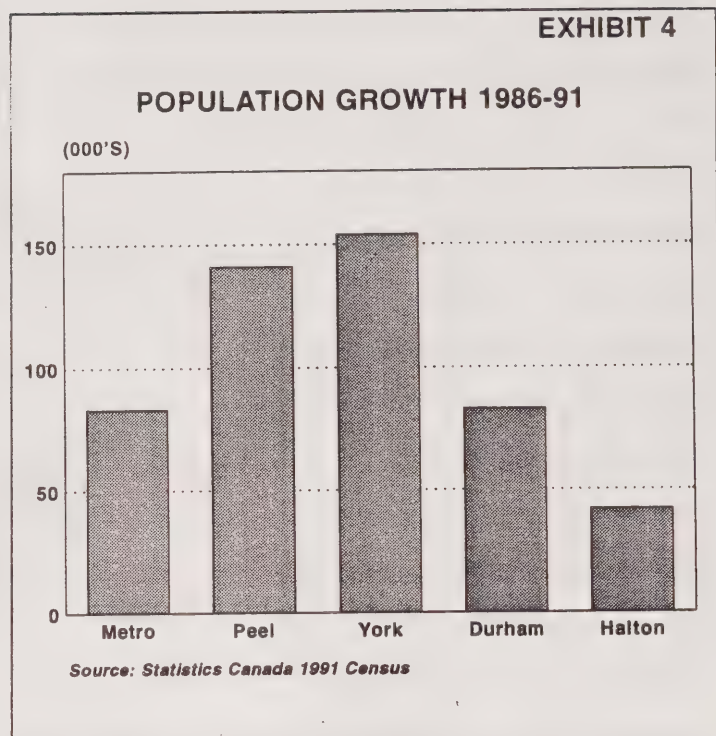


This situation is not dissimilar to other industrialized countries. The population of Great Britain, for example, is increasingly concentrated in Southeast England, the hinterland area surrounding metropolitan London.

Similarly within the GTA, most of the population growth is occurring outside of Metropolitan Toronto (Exhibit 4), where there are fewer constraints to development because of the large quantities of "greenfield" development land. By 1994, it is estimated that less than half of the GTA population will reside in Metro Toronto. Metro's population growth of 80,000 during the recent Census

² The Hinterland is defined as the counties or regions of Niagara, Brant, Hamilton-Wentworth, Waterloo, Wellington, Dufferin, Grey, Simcoe, Muskoka, Northumberland, Victoria, Peterborough and Haliburton.

period is a one-time gain resulting from the redefinition of a Census person³. Using the 1986 definitions, Metro's population would have been stable or declined slightly during the period. As the GTA population increases its impact on the neighbouring Counties and Regions, the GTA Hinterland, also



increases. Recent population growth in the Hinterland has been very strong. Together the GTA and its Hinterland account for over 75 per cent of the growth in Ontario's population during the last decade.

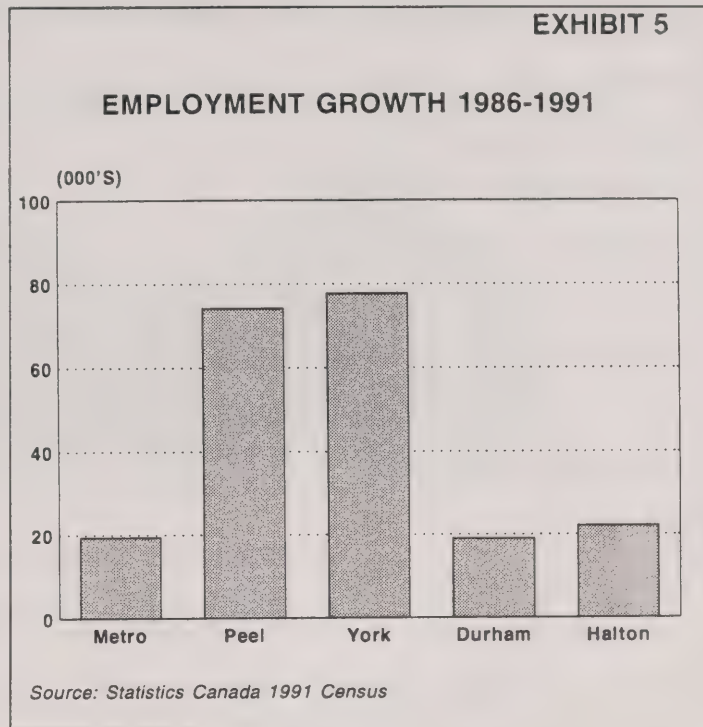
C. EMPLOYMENT ADVERSELY AFFECTED BY THE RECESSION

Job creation, as a result of the recession and restructuring, has not kept pace with population growth. The result has been a rise in the unemployment rate and a decline in labour force participation from the peak levels experienced in 1989.

³ The census population now includes, as of 1991, non-permanent residents who are mainly people on work visas and student visas, or refugee claimants awaiting refugee hearings (once a refugee claim is accepted the person is then counted as an immigrant). There were about 100,000 non-permanent residents in the GTA in 1991, most of whom live in Metro.

Employment declines have been concentrated in the manufacturing, construction and retail trade sectors. Metro Toronto has lost a higher proportion of jobs than the surrounding Regions.

Recently-released results from the 1991 Census indicate that even over the boom years of the second half of the 1980s, employment growth in Metro was limited. Between 1986 and 1991, the highest levels of employment increase occurred in York and Peel Regions (Exhibit 5). Metro Toronto and each

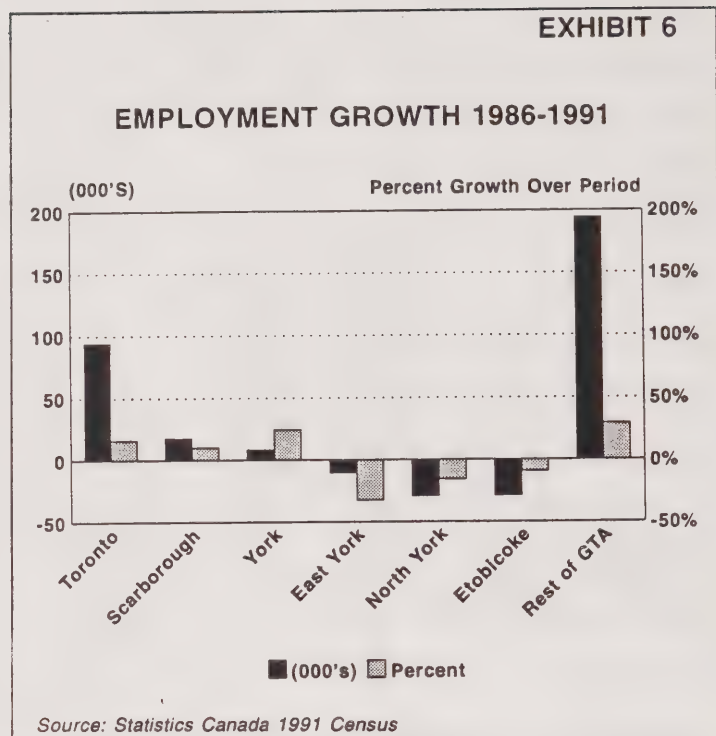


of the Regions is estimated to have experienced employment levels in 1989 that were higher than the 1991 Census levels.

Some important employment patterns are not apparent with a glance at the Metro Toronto numbers (Exhibit 6). There was strong expansion in the office and service sectors located in the central area of the City of Toronto during the second half of the 1980s. Employment declines were concentrated in the now-aging industrial districts of Toronto, Etobicoke, East York, North York and Scarborough. Scarborough has been able to balance the trend in the decline of its older districts as the only Metro municipality with a supply of raw land readily available for development.

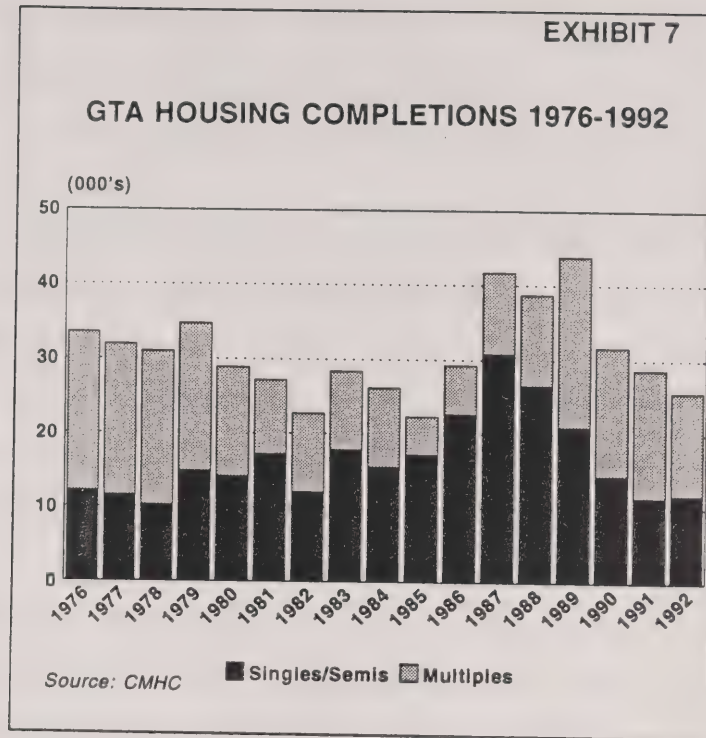
In addition to the Census figures, Metro Toronto's annual employment survey shows similar declines starting in 1990. A more recent trend not yet apparent in the 1991 data, is the beginning of the restructuring in the key office sectors, government and finance, and the associated job loss. Much of the employment decline in

these sectors began after 1991. The City of Toronto is probably experiencing the effects of this trend at present.



D. HOUSING BEING BUILT IN SPITE OF RECESSION

Completions of new housing in the GTA area peaked during the "boom" conditions of 1987 to 1989. New construction has since declined, consistent with the post-boom correction of the housing market and current levels of household formation (Exhibit 7). During the boom conditions of the late 1980s, the consumption of housing increased at a rate faster than demographic conditions warranted. Since that time the market has been experiencing a correction. The recession, with its particularly profound impact on the younger population, has also dampened the level of household formation as the recession compels more people to "double-up" or stay at home.



III THE GTA IN A CHANGING WORLD

In preparing forecasts of population, employment and housing for the next thirty years and beyond, it is imperative that consideration be given to the changing structure of the economic environment and the dynamic nature of the GTA. A look into the future environment can be guided by focusing on clearly defined areas of known change and on broadly defined change agents. This section of the report discusses changing forces from both a global and domestic perspective as a means of evaluating the ability of the GTA to generate a dynamic employment base. The key forces discussed are: the external economic factors that will cause a shift in the GTA's economy; the implications of the changing workplace; constraints imposed by the nation's domestic structure; and the implications of major demographic shifts. These forces collectively shape a framework within which the outlook for the GTA needs to be considered.

A. THE STRUCTURE OF THE GTA ECONOMY SHIFTS FOCUS

Events of the past several years have already demonstrated that the GTA, along with the rest of southern Ontario and many of the other major industrialized economies within the OECD nations⁴, is facing significant change to the structure of its economy.

The GTA economy, as it responds to the globalization trends of the 1980s has witnessed a fundamental shift from being centred on the goods-producing sector

⁴ Organization For Economic Co-operation And Development, a 24 member organization of European nations plus Canada, the United States, Japan, Australia, and New Zealand.

to becoming increasingly focused on the service sector. Between 1986 and 1992 manufacturing employment declined from 24.3 per cent of total employment to 18.7 per cent, while employment in the service related sectors rose from 44.5 per cent to 51.1 per cent. Similar patterns can be seen from an examination of employment by occupation. Between 1986 and 1992 jobs in management and professional occupations rose from 31.1 per cent of jobs to 36.4 per cent along with small gains in sales and service occupations. At the same time manufacturing related occupations have declined.

These developments have resulted in change in the relative importance of the major employers within the GTA. Traditionally, the economic engine of the GTA has been the auto-related sector dominated by the Big 3 auto assemblers, the financial sector, and government related activities. This is still true today, but as each of these three sectors downsizes and streamlines several other sectors are growing in relative importance. The growth occurs in the high-tech information sector, telecommunications, pharmaceutical and wholesale/ distribution. Increasingly today, as these shifts occur, jobs are being created primarily by small companies employing fewer than 10 people as opposed to the large companies like General Motors, Ford, IBM, Northern Telecom, etc., who are all being forced to downsize.

As these shifts in industrial/commercial structure take place, the traditional industrial locations within Metro Toronto are finding more and more established manufacturing companies closing and relocating business activity. This continual movement of companies is a reflection of the survival mode in which organizations have been placed as they address the competitive challenges of today.

A distinguishing feature of the GTA's economy is its high dependence on trade with the U.S. This is not surprising, as the Canadian economy is one of the most trade dependent economies in the world and Ontario is highly dependent on its trading relationship with the United States. Ontario sends approximately 90% of its exports to the United States. Our trade with the U.S. is focused on the states of Michigan, Wisconsin, Ohio, Illinois and Indiana. The auto-pact plays a significant part of this trade linkage and with the key auto-related plants located within the GTA it is clearly evident that this region has both a high degree of interest and interdependence with the United States and trade related activities.

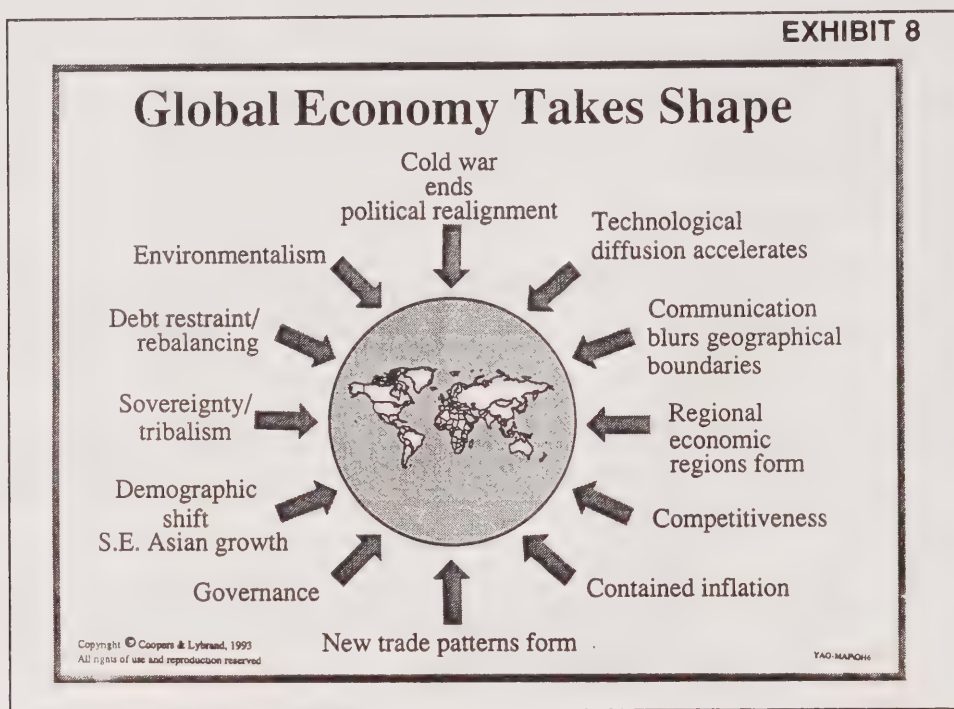
This brief discussion of the structure and trade focus of the GTA demonstrates the critical importance of:

- the interconnection of the auto-related sector and trade with the U.S. Currently it is estimated 1 in 6 jobs in the GTA is directly related to this sector;
- the shift to the service related sector from the goods producing sector which is resulting in changed employment patterns by type of employment and location; and
- the jobs that are being increasingly created in the knowledge-intensive sectors of pharmaceutical, information technology and value-added business services.

B. EXTERNAL ECONOMIC FORCES ARE SHAPING THE GTA

Events of the past decade have demonstrated that the GTA, like so many other jurisdictions, is being increasingly affected and reshaped by forces beyond its boundaries and effectively beyond its control. This section discusses these external forces as a basis for understanding the new business environment and the consequences for employment within the GTA.

Large business enterprises and capital markets have become increasingly organized along international rather than national lines, making it increasingly difficult for individual national governments to plan and regulate their economies. Seven key forces are currently reshaping the global economy as we approach the 21st century: political and economic realignment; growth of Asia; new trading patterns; technological change and diffusion; contained inflation; competitiveness; and the formation of economic regions (Exhibit 8).



1. Political And Economic Realignment

Following the fall of the Berlin Wall and the collapse of communism in the former Soviet Union and its satellites, the world has and continues to witness major political and economic realignment: from the redrawing of national boundaries and outbreaks of tribalism, to the redesign of key world institutions. Along with the political changes goes economic transformation as China and the former Soviet Union embrace market-driven economic principles.

2. Growth of Asia

For several decades the centre of global manufacturing has been shifting away from North America and Europe to the Pacific Rim as multi-national companies have been forced to reduce costs in order to remain competitive. This shift in the location of manufacturing capacity has been assisted by the emergence of global product markets which in turn have created the need for standardization of international companies. Today, it is difficult to distinguish in which part of the world a product was designed or produced. The result has been the rapid industrialization and growth of the Asian 6: South Korea, Hong Kong, Singapore, Taiwan, Thailand and Malaysia. These countries have been reporting real growth of between 7 per cent and 12 per cent a year over the past decade and have captured a significant slice of global manufacturing capacity. In addition, the two sleeping giants of Asia -- China and India -- have also started on the road of change and are recording strong growth.

This region of the world is expected to see significant expansion over the coming decades as it continues to act as a centre of consumer goods manufacturing for the world economy. The region is experiencing significant expansion in inter-regional trade and each country's domestic economy is growing as a result of strong job creation and real income gains. The Asian economies have huge potential for growth as a result of the age profile of the region which will support strong consumption. Supporting this analysis is the recent updated view of the International Monetary Fund which estimates (based on Purchasing Power Parity Measures) that if current growth patterns continue, the combined economies of China, Hong Kong and Taiwan will be larger than the United States economy in less than a decade. Already, China's economy is ranked in terms of gross domestic product as number three behind the U.S. and Japan. On a similar comparison India is ranked number six, while Canada has dropped from the seventh largest economy to eleventh position.

3. New Trading Patterns

The political and economic developments of the past decade have resulted in a significant shift in trade patterns. The next several decades will continue to see manufacturing of consumer and industrial products centred in Asia and the manufacturing of higher value-added electronic, computer-related, environmental, telecommunications, bio-technology and pharmaceutical products concentrated in the OECD countries. Likewise, with the opening up of the former Soviet Union and South America, trade

in natural resources will shift away from Canada, Scandinavia and Australia to be shared with these two new resource-power regions.

4. Technological Change and Diffusion

The key to industrial strength and competitiveness in the 21st century is the ability to embrace and diffuse technology. The exponential growth and the dynamism of technology has altered and will continue to alter how companies organize to serve customers and design product offerings. Technological change has given birth to the next phase of the industrial revolution -- the knowledge-based economy. Another aspect of this change is the advances in communications technology. International boundaries have become further blurred by technology that is simplifying and speeding the flow of market, financial and operational information across countries and continents. These technological advances have brought about the reality of a capital market that now circles the world, resulting in growing equity links between corporations in different countries. The nationality of companies operating in world markets is becoming less relevant.

5. Contained Inflation

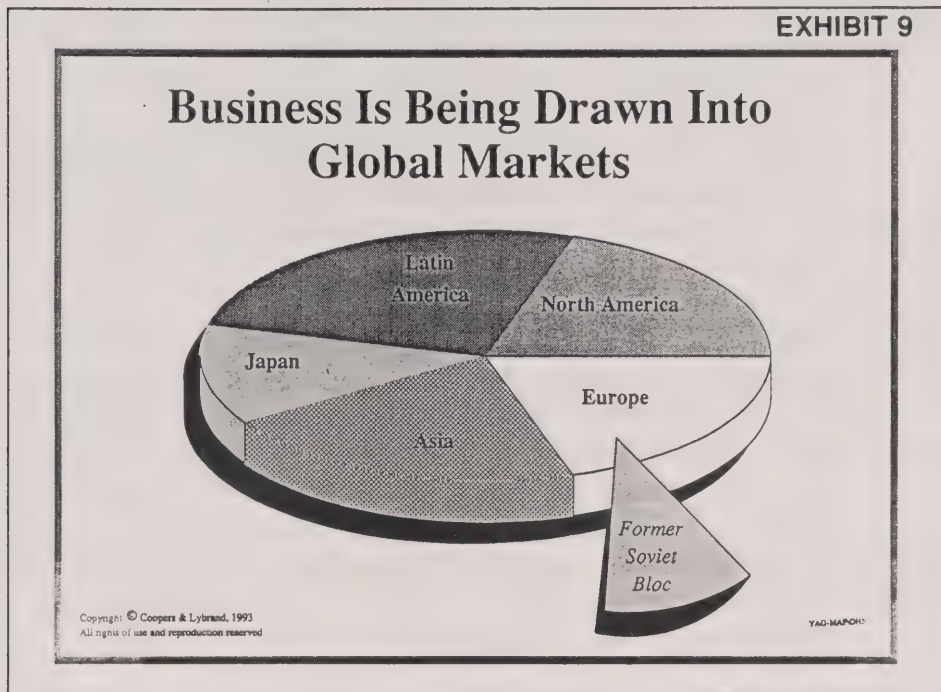
The OECD countries have successfully brought inflationary expectations under control over the past decade and it is generally anticipated that monetary policy will continue to support a contained inflation environment over the balance of the 1990s. This means that organizations will need to continue to focus on cost containment to remain competitive; inflated prices cannot be passed on to customers. Business practices will continue to be altered accordingly.

6. Competitiveness

The above factors have intensified competition in trade. New foreign competition is penetrating previously sheltered markets in Canada. Competition forces the product or service offering to be made at the lowest price for highest value whether a company is producing for export or the domestic market.

7. Formation of Economic Regions

To succeed, companies must now have access to strategic global markets and as a result, the world is currently witnessing the redrawing of national boundaries and new economic and politically associated regions are being created. The decade ahead will likely see further consolidation with five key regional trading areas crystallizing: North America, Latin America, Europe, Japan and Asia. (Exhibit 9).



- **North America**

The historically close trading relationship between Canada and the United States and the Canada-United States Free Trade Agreement form the core of the North American trading bloc. Negotiations are currently underway to extend the Canada-U.S. free trade area to Mexico, creating a common market of 365 million people. This is the GTA's single most important export market.

- **Latin America**

Governments in South America are decisively breaking from the growth-inhibiting protectionist and inflationary policies of past

decades as multiparty democracies replace authoritarian regimes. Chile, Uruguay and Argentina have initiated talks towards a "South Cone" free trade area. Negotiations have also begun towards a Central American common market. Conceivably, the Latin American free trade areas could merge with the Canada-U.S.-Mexico trading bloc to create a Western Hemisphere common market in the 21st century.

- **Europe**

The second most dominant market is Europe. The 12 Member States of the European Community (E.C.) are eliminating remaining non-tariff barriers and harmonizing policies and regulation as part of the Europe 1992 Single Market Program. This strategy has resulted in a more rationalized and integrated European economy that includes low-cost centres of manufacturing in the newer member states of Spain, Greece and Portugal.

The former Soviet Bloc states of Eastern Europe have become multiparty democracies and are organizing to embrace the free market. The former Soviet Union appears to be finally committing itself to dismantling central planning. Together, the former USSR and its satellites will likely seek some form of understanding or association with the E.C., creating an "extended Europe" embracing up to 700 million people over the coming decades. The challenge in Europe is the handling of these adjustments coming out of the dismantling of communism.

- **"Japan Inc."**

Japan's export-driven manufacturing economy has represented the leading edge of globalization in its ability to successfully adapt their products to and market them in countries around the world. In doing so, they have built reputations as leaders, first in price, then in quality and technology. In the 1980s, global marketing strategies were augmented by global investment strategies, an example being the establishment of "transplant" vehicle assembly facilities, first in the United States and, more recently, the European Community. In the 1990s Japanese products will continue to set the quality and price standard against which products are judged in the international marketplace. But, like most other OECD centres, Japan too, faces challenges on both the domestic and international fronts.

- **Asia**

This group includes the rapidly growing "four tigers" of South Korea, Hong Kong, Singapore and Taiwan. They are being joined in their rapid pace of industrialization by two traditionally underdeveloped countries: China, which is gradually dismantling central planning despite its nominal adherence to Marxist doctrines; and India, which is reversing decades of protectionist policies and beginning to aggressively seek foreign investment and markets. The China Economic Region is the fastest growing area in the world economy today and offers numerous opportunities to GTA based organizations.

8. Implications For The GTA

The combination of these globalization trends and the need for corporations to reposition themselves to survive and win has changed the business environment in which the GTA operates. As information is widely diffused companies are forced to benchmark themselves against the competition in many more jurisdictions than before. Today, a company producing for a local customer cannot discount foreign competition taking its customers away. This means that for a jurisdiction like the GTA to be an attractive business location it must:

- be informed about the international business environment and be able to work with companies located within its jurisdiction to achieve and sustain competitive position;
- be able to adjust its policy framework to accommodate the changing needs of existing and new types of business;
- provide a competitive physical infrastructure and cost structure that will enable business to prosper; and
- recognize that change is a continuum and opportunities originate from change.

The implications arising from these changes for the employment forecast are significant. As the restructuring process unfolds, job losses in traditional sectors and companies will continue as these organizations seek productivity gains. Although new jobs will be created in the newly emerging sectors of the knowledge-based economy the unemployment rate will remain at relatively higher levels for several more years. Longer term

pressures will be on the GTA to support the education and training needs of its population to ensure the skill base for tomorrow's jobs. The GTA is well positioned with its current core of knowledge intensive jobs/sectors to participate in the economy of the 21st century.

C. THE WORKPLACE IN THE 21st CENTURY

The globalization of the world economy is rapidly changing the work environment. The workplace is changing as a result of the development and refocusing of economic activity as the knowledge-based economy replaces the manufacturing economy as the economic base of the GTA. As a result, organizations are rearranging how they operate. This section of the report discusses these two factors, the knowledge-based economy and the workplace of tomorrow and the implications for job creation and employment patterns in the GTA.

1. Knowledge-Based Economy

The OECD economies are shifting from being based on an electro-mechanical infrastructure to a computational infrastructure. This means that computers progressively take over routine activities and thereby facilitate a new set of work activities and ways we interact.

This fundamental shift is giving birth to an intensification of the knowledge-based economy, by which we mean that over 40 per cent of the workforce of an organization will be highly educated and skilled. In fact, even during the 1990-1992 recession, sectors that fall within this category have been actively creating jobs. Exhibit 10 shows some of the key sectors that constitute this new economy, as well as those industries in the traditional economy or age-related activities which underpin economic activity in the GTA and will continue to do so in the years to come. By shifting to these sectors from traditional manufacturing, value-added activities can be created.



2. The Workplace Of Tomorrow

As these new sectors emerge, the technological changes discussed earlier give rise to fundamental shifts in workplace arrangements. Stephen R. Barley, a professor at Cornell's School of Industrial and Labour Relations has identified six key trends that are altering the workplace. These are:

- *The average company is becoming smaller and it employs fewer people. As the emphasis is put on the need to create flexible organizations, the large companies become inefficient and to survive they are broken down to form new smaller flexible entities. The restructuring currently occurring with IBM demonstrates these changes.*
- *The traditional hierarchical organization which is well suited for routine work is giving way to a variety of organizational forms. Knowledge-based activities require higher-order thinking and analysis that thrive in flat incentive-focused smaller firms. Professional consulting and soft-ware companies optimize such developments. Often groups of people will form to solve a specific problem and then disband. The module organization could well become the norm. These types of groups are being formed by project engineering firms and consulting groups.*

- *A new class of worker is being born that is neither management nor operator.* The highly specialized technician that does not fit previous definitions will become the key skill set of tomorrow. Expertise ensures employment, not length of time employed. Technologists are the backbone of the biotechnological and pharmaceutical companies.
- *The vertical division of labour will be replaced by a horizontal division.* Management will become a co-ordination function, not a command and control function. These changes are even occurring on the shop floor where flexible teams take responsibility for the final product.
- *Work itself will move away from the 9-to-5 definition* as people move to knowledge-based activities and new organizational strategies. Work will be defined as constant learning and thinking.
- *The workplace will be redefined with some jobs shifting from traditional places of employment to home-based employment in the 21st century.* Many corporations such as Dupont and insurance companies have made their sales forces home based to reduce commuting time and cost-structures. Modern communications allows interface from remote locations. This changing workplace is already showing up in the statistics in the GTA. The 1991 Census showed that in the CMA, 5 per cent of the workforce worked from home in 1991 compared to 2.1 per cent in 1986. As the restructuring of the 1990s unfolds, this number can be expected to rise as many companies utilize telecommunication networks and seek to reduce costs.

These trends also imply that traditional manufacturing jobs will continue to decline and that more and more employment land⁵ areas will contain businesses that have no direct involvement in manufacturing. Computerization also means that traditional office employment will not see the growth experienced in the 1970s and 1980s. Space per worker may continue to experience a modest increase as clerical functions continue to be automated and the need for electronic

⁵ In this report employment lands is used as a term to describe the extensive land areas that in the past were called industrial areas or business parks. Due to the broad range of businesses and employment opportunities found in these areas today they have been defined as employment lands.

offices grows. The bottom line is the new workplace will be a more flexible environment with increasing emphasis on knowledge.

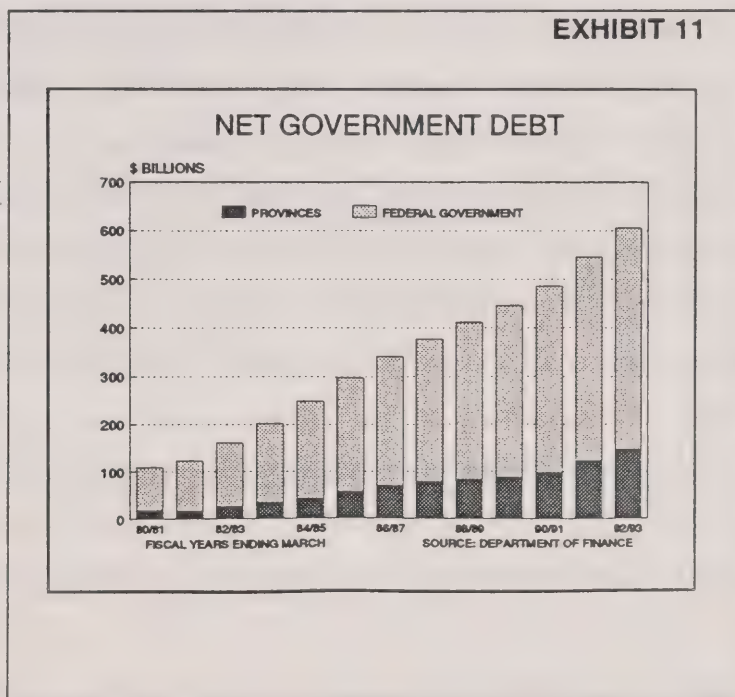
D. DOMESTIC FISCAL SITUATION CREATES CONSTRAINTS

In addition to the forces of change arising from the international arena, a key factor originating within Canada's domestic economy that will affect economic development in the Greater Toronto Area is the debt/deficit situation of the federal and provincial governments.

Today, Canadians are responsible for \$460 billion of debt at the Federal level and about \$150 billion at the combined Provincial level (Exhibit 11). The result is

that Canada finds itself in the ominous position of being one of the largest debtor nations (relative to the size of GDP) in the industrialized world, and highly dependent on foreign lenders who hold Canadian securities. As has been demonstrated over the past several years, this

mounting debt load impairs fiscal flexibility and limits program options.



It is fair to argue that, because of the worsening debt situation in Canada and in the Province of Ontario, the fiscal environment for the next decade will be one

of restraint, with the emphasis placed on cost and program retrenchment and higher taxes. This environment will not necessarily be compatible with assisting companies to competitively meet new global market demands, but will rather be a time of significant re-engineering of government operations and programs. This tight fiscal period will require the formation of new strategic alliances and partnerships in order that the private sector can assume some of the important infrastructure roles that governments in the past have provided. Private financing and construction of water and sewage systems and the development of toll roads are among the types of changes that could occur.

The debt crisis and reduced fiscal flexibility means that the GTA faces a protracted period of time in which government at all levels will be forced to streamline the delivery of services, reduce the built-in cost structure, raise taxes and fundamentally address program choices. These developments imply a changed role for the individual governments within the GTA and a need to foster a closer, more streamlined partnership. As part of the streamlining of government at all levels arising from the cost-reduction exercise, the public sector employment base will be reduced and many activities of government will become the responsibility of the private sector. This means a change in employment mix and a re-balancing of job creation. For the forecast period to 1996 the downsizing of government will result in higher levels of unemployment.

E. IMPLICATIONS FOR THE EMPLOYMENT FORECAST

Interpreting these fundamental shifts in terms of economic structure and employment patterns is critical in assessing the ability of the GTA to create jobs and support population growth.

Despite the escalation in the numbers of unemployed in the GTA over the past several years, as the cyclical recession took hold and massive restructuring hit the area, there is evidence that the GTA economy is structurally changing to obtain the benefits from the knowledge-intensive sectors. The major shifts that are occurring are stressful as traditional manufacturing jobs continue to be lost from the mature industrial areas within the GTA. This trend reflects the long established and continuing movement out of older industrial areas to newer greenfield sites when a company needs to expand or requires a new plant. Within the GTA, we have witnessed these moves and on balance have not seen a major negative impact on jobs in the overall region. However, traditional manufacturing jobs have been lost altogether as sectors have down-sized, closed, or relocated within the North American Trading Region. Over the past five years, some municipalities within the GTA have been severely affected by the shifts within the traditional manufacturing sectors.

The most significant impacts have occurred within Metro Toronto and the Region of Durham in terms of loss of traditional manufacturing jobs. This has occurred as part of the fundamental downsizing, closure, and relocations in a number of key manufacturing sectors including: auto, food processing, and metal fabrication.

While these developments have been occurring, the knowledge-intensive sectors have been growing and establishing new roots within the GTA. In particular, the past five years have continued to see growth in the telecommunications, pharmaceutical, biotechnology, business services and financial service sectors. These organizations use space and people differently and often select a greenfield site as a location. Newly developing areas provide the flexibility to create custom built space in locations that are convenient to both its customers and the homes of its workers at costs that are lower than in older employment areas. New employment opportunities in the future will be built on the knowledge-intensive

sectors -- an economic base that is already showing strength. The GTA must recognize and build upon the fact that it is the financial centre of Canada, has a strong medical and education presence, and is well placed in the telecommunications, computer, and information technology sectors.

The job creation assumptions are critical to the population and employment forecasts. The analysis undertaken for this study shows that the job creation of tomorrow will be in the new emerging sectors concentrated in knowledge-based activities and links with small companies. Jobs associated with employment lands, often referred to as industrial lands, are, and will continue to be, affected by economic restructuring. Employment land uses will change over time to accommodate more knowledge-based companies. This trend has significant implications for the employment areas that contain older manufacturing industries. It is these areas which have been most susceptible to economic restructuring. In addition, it is very difficult to recycle older industrial buildings, once vacated, to meet the needs of the knowledge-based economy. Growth is likely to be propelled increasingly into newly developing areas as companies seek appropriate locations to combine technological, office, sales and management activities.

Employment in major office buildings is expected to grow at a slower rate than that previously experienced as companies continue to pursue efficiency through technology. More and more companies will wish to consolidate office activities at the production location. Also companies will continue to move sales-like activities to home-based locations. Population-related jobs will be affected by two forces. On the negative side job growth in the public sector and government-related activities will be relatively flat. But, this will be counter-balanced by home employment which will continue to increase as the new economy and work relationships develop.

The combination of the globalization and domestic structural changes currently underway means that the world of yesterday is being rapidly transformed and it is generally accepted that change will continue over several more decades.

In terms of preparing this demographic and labour force forecast these trends have been interpreted as follows:

1991 - 2001

- The internationalization of the world economy will continue.
- Fiscal restraint will continue in Canada.
- Canadian corporations will continue to restructure.
- The work place will be under significant structural change.
- Unemployment will continue at high levels.

2001 - 2021

- Period of growth and trade balanced between the five principal trading regions.
- Rapid growth in Asia and maturing of markets.
- OECD restructuring shift to knowledge-based economy completed.
- Corporate restructuring completed as module organizations become norm.
- Work styles and roles adapted to new economy.
- Unemployment less a problem as labour force growth slows and restructuring is complete.

F. DEMOGRAPHIC CHANGE WILL HAVE A MAJOR EFFECT ON THE FUTURE GTA

Of all the change agents discussed in this section of the report, the demographic factors are possibly the single most important factor to be considered. The attributes of the existing population base dictates many of the patterns that the GTA will face in coming years. Of the numerous demographic factors to consider, three emerge as having a greater impact on the future outlook for the GTA. These are the dynamics of fertility and mortality; the age structure of the population; and the implications of the two previous factors on migration prospects.

1. Levels Of Natural Increase Remain Below Replacement Levels

Fertility levels in Canada, and in fact most western countries, remain below the replacement level of 2.1 births per female. This situation has existed for many years and there appears to be little reason to anticipate any significant deviation.

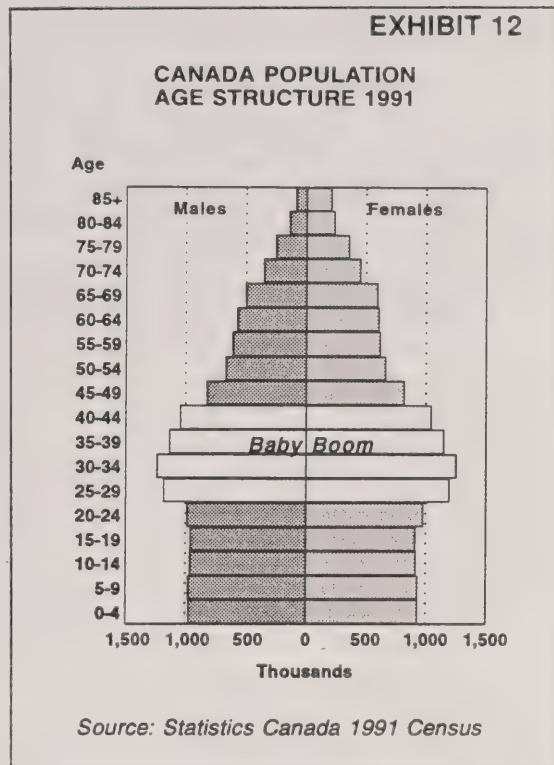
The pattern of fertility is also life-cycle related. The fertility rate, while very low for women under 20, increases through the early 20s, peaks in the late 20s, remains high into the early 30s, then declines in the late 30s, ultimately reaching biological limits in the 40s. The largest age group of the baby boom generation has just passed through the age of peak fertility. Accordingly, 1992 recorded the largest number of babies born in Ontario in the last thirty years.

As the less populous "baby bust" age groups move into their childbearing years during the 1990s and the first decade of the next century, the number of births will decline somewhat from current levels.

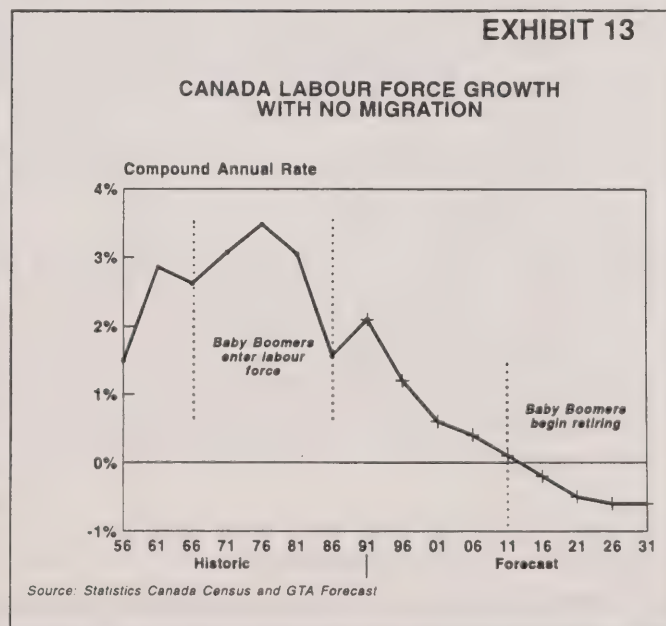
Mortality rates are also life-cycle related. Generally low rates can be expected after early childhood and rates will increase with age. Also, women have a lower mortality rate in all age groups than men. While slight decreases in mortality rates are anticipated, the changes are not expected to be significant for purposes of this forecast.

2. Population Age Structure Is A Key Factor In Determining GTA Growth Prospects

The age structure of the Canadian population is overwhelmingly influenced by the baby-boom population, which refers to those generally born in the 20 year span between 1945 and 1965. This age group is much larger than either the population age groups older or younger than themselves (Exhibit 12). Baby-boomers have had a large impact on a number of factors in the past and most certainly will continue to do so through the forecast period. It should be noted, that the GTA's age profile exhibits a less-pronounced baby boom effect than elsewhere in Canada due to continued migration.



One of the key effects of the age structure is that the labour force growth rate is about to slow. The working age population is currently concentrated in the ages of 30 to 50, i.e. the baby boomers. During the 1970s and early 1980s Canada had a rapidly expanding labour force as the baby boomers reached working age. Now that all baby boomers are within the

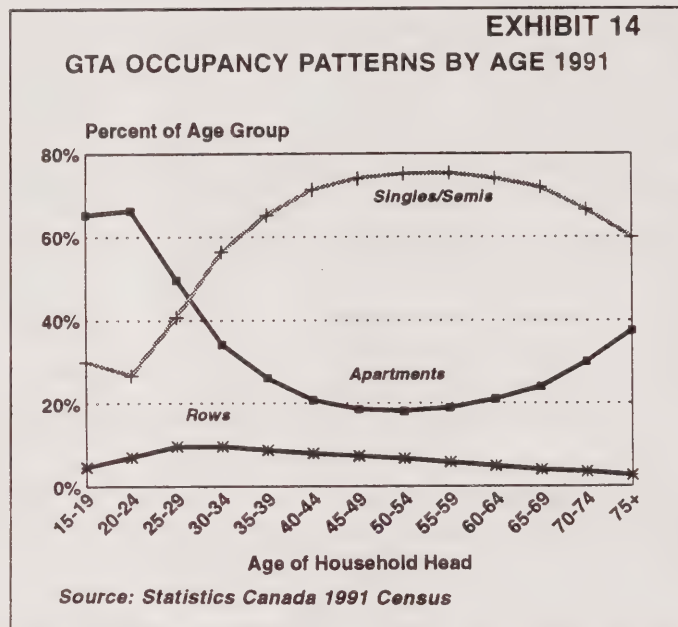


working age group, the number of new entrants to the labour force will

start to become increasingly small. Once the baby boomers begin to retire, in the post-2011 period, labour force growth will become entirely dependant on immigration. Without immigration, Canada's labour force would begin to shrink after 2011 (Exhibit 13).

The other key influence of the age structure will be on the pattern of housing development. Life-cycle determines the rate of household

formation as well as the housing-type preferences (Exhibit 14). The young typically begin to form households during their 20s, often prior to first marriage and most often occupy an apartment-type unit. In their late 20s and early 30s, during the peak times for the formation of family households, preference typically shifts to ground-related dwellings⁶. Most families remain in the family home until late in life when property maintenance becomes too difficult or the death of a spouse provokes a housing change. It is only then that seniors show a marked increase in preference for apartment units.



For a given age group, these life-cycle and housing market patterns have not changed significantly over time. However, the impact of the baby boom has changed the nature of the housing market significantly over the past 25 years and will continue to do so over the forecast period. The baby boom created an enormous demand for apartment units during the late 1960s right through the 1970s. The baby boom has now moved into the age groups where most seek ground-related dwellings. Demand for single-detached housing will continue to increase as a proportion of the total housing demand until after the turn of the century. Subsequently, retiring

⁶ The data collected on occupancy patterns only reflects housing structure type. In this case ground-related consists of single-detached, semi-detached and rowhouse units (i.e. those units that are not defined as apartments).

baby boomers will tend to increase the proportion of new apartment units needed in the housing stock.

3. Immigration Policy Key Factor In Determining Future Growth Prospects

The GTA has always attracted significant numbers of migrants. Historically, migration to the GTA consisted of significant numbers of migrants from all sources: international, other provinces and from elsewhere within Ontario. The average rate of net migration to the GTA has been 13.4 migrants per 1,000 residents annually over the last 30 years. Current rates are slightly above this long-term average.

Immigration is by far the largest component of the GTA population growth with over one-third of Canada's immigrants settling in the region. Therefore, current federal immigration policy has a profound effect on the rate of GTA growth. In 1990 the federal government announced that in the future the setting of immigration levels would be based upon a more strategic approach based upon a five year period (as opposed to annually), complemented by monitoring and updating.

The need to modify the outlook for declining population and labour force growth in the future was the major strategic reason for the five year plan. At that time an immigration target of 250,000 people per year was established, a target that was met in 1992. This new target was set based upon an extensive consultation process that focused upon: the number of immigrants; the balance among the categories of immigrants; the settlement and integration of immigrants; and the factors affecting the distribution of immigrants across Canada. For the GTA, this indicates about 80,000 new arrivals annually.

In the immediate future, to 1995, immigration levels are set by federal policy. Since the policy was set in 1990 numerous changes have been made to policy details, particularly to the categories of immigrants, however the annual immigration target has not been altered. From a forecasting prospective, the difficult task is to determine future policy and public attitudes toward immigration.

As discussed, there are compelling reasons for Canada to continue to pursue current policy. These reasons include: a dramatically declining rate of population growth in most parts of the country and a sharp decline in the rate of growth in the labour force. The combination of these factors will

result in an increase in the dependency ratio⁷ in Canada starting early in the next century with a sharp increase occurring after 2011 when the first part of the baby boom generation starts to retire. This ratio suggests that there will be a higher proportion of the population not in the labour force to those working. This could have significant long-term social and fiscal implications. The GTA is anticipated to have the ability to create the jobs that are necessary to maintain current levels of migration. The forecast has factored in the possible effect of the current high unemployment levels on migration policy over the short-term.

These factors will affect the growth outlook in the GTA. The age structure of the Canadian population has conditioned many aspects of our society and this has been particularly true since the start of the baby boom. The influence of this singular age group on virtually all aspects of our society is not expected to diminish over the forecast period.

G. THE FUTURE OF THE GTA IN A CHANGING WORLD

The combination of globalization and domestic structural changes means that the world of yesterday is being rapidly transformed and it is generally accepted that the transformation will continue over several more decades.

For the task of preparing this demographic and employment forecast, these trends, as discussed above, have been interpreted as follows:

- External Economic Forces
 - Growth in Asian economies means a decline in Canada's traditional manufacturing sectors

⁷ The dependency ratio is defined as the population 0 -19 plus the population 65+ expressed as a ratio of the population 20-64. The ratio is basically the proportion of the young and the old population to the working age population.

- Canada's dominance of natural resource world markets will be curtailed;
- Continued technological changes will continue to foster the development of the knowledge-based economy in Canada and the GTA; and
- Lean, competitive companies and organizations will be the ones that succeed in the North American trade area.
- Changing Workplace
 - Highly-educated and skilled workforce will be required to compete in world markets;
 - Smaller companies and organizations and more home-based occupations means less growth in office employment; and
 - Knowledge-based companies will replace heavy industry as major land use in employment lands and will be attracted to greenfield locations.
- Fiscal Constraint
 - Fiscal constraint will force Canadians to address the structure of government and the need and delivery of programs.
- Demographic Change
 - Levels of natural increase to remain below replacement levels;
 - Decline in labour force expected as baby boom moves towards retirement;
 - Demand for ground-related dwellings to continue through early part of the forecast period and then shift to apartment-type housing for retirees; and
 - High levels of migration to the GTA will contribute to growth in population and labour force throughout the forecast period.

IV THE POPULATION AND EMPLOYMENT FORECAST FOR THE GTA

This chapter sets out the forecasts for population, housing and employment in the GTA over the next 30 years and the following decade. The forecasts and assumptions are presented graphically wherever possible to assist the reader's comprehension of the relative impact of the factors behind the forecasts. The discussion focuses on the "Reference" forecast which is considered by the consulting team, to reflect the most probable scenario. Low and High Forecasts are considered in Chapter VI. The forecasts are based on the underlying trends discussed in the previous two chapters. A complete discussion of the forecast assumptions and results are included in the appendix bound separately.

A. POPULATION IN THE GTA IS ANTICIPATED TO RISE TO 6.7 MILLION BY 2021

The population of the GTA is anticipated to increase from current levels to the 6.7 million range by 2021. Although the addition of about 2.5 million people over 30 years to the GTA seems large, the GTA is actually entering a period of much slower population growth. In comparison to historic growth rates, the rate of growth will be modest.

The GTA population forecast is based on assumptions about three critical factors: migration, fertility and mortality. Fertility and mortality rates applied to the existing population determine the level of natural increase. The total population growth over a given period is determined by adding the net number of migrants to the natural increase.

The forecast results and key assumptions for the Reference Forecast are summarized in the tables below and are discussed in the following sections.

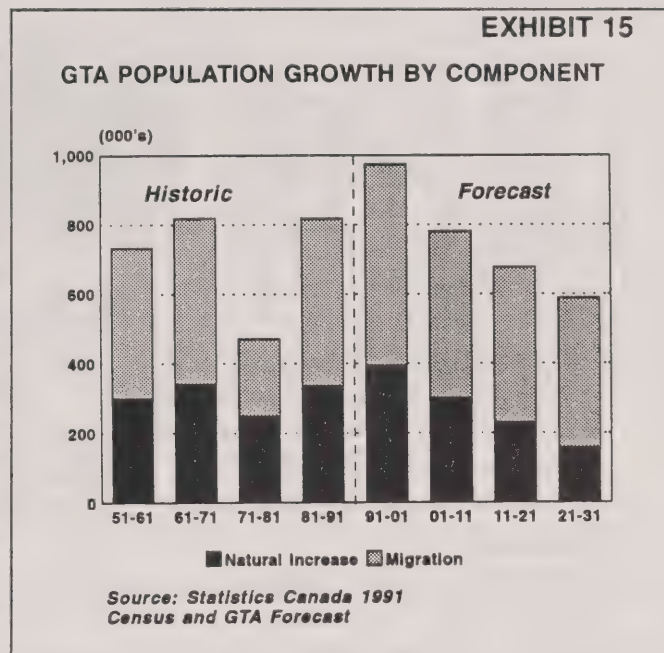
Year	GTA Population (millions)	Growth Rate (compound annual)
1961	2.1	---
1971	2.9	3.3%
1981	3.4	1.6%
1991	4.2	2.2%
2001	5.2	2.1%
2011	6.0	1.4%
2021	6.7	1.1%
2031	7.3	0.8%

KEY ASSUMPTIONS FOR GTA REFERENCE POPULATION FORECAST		
Total GTA Migration		Net migration declines through the forecast from 62,000 annually to 1996, down to 43,000 annually by the 2026-2031 period.
Migration Components (inputs to total GTA migration)	Canada Immigration	Current levels of 250,000 per year to mid-1990s, declining to 210,000 by the late 1990s, then 200,000 per year for the remainder of the forecast period.
	GTA Net Immigration	Current levels of 75,000 per year to mid-1990s then declining to about 60,000 per year for the remainder of the forecast period.
	GTA Net Inter-Provincial Migration	Levels expected to stay low for entire forecast: approximate current level of 2,000 annually then in the 3,000 to 6,000 range for the forecast period.
	GTA Net Intra-Provincial Migration	Out-migration from GTA to rest of Ontario expected to continue at rates of 16,000 to 20,000 annually.
Fertility Rates		1986-1990 average age-specific fertility rates used for entire forecast period.
Mortality Rates		1986-1990 average age and sex-specific mortality rates used for entire forecast period.

1. Natural Increase Will Account For A Decreasing Share Of The Growth

Fertility rates have increased slightly in the past few years and mortality rates have declined marginally, but neither change indicates a trend toward major change in the future. As a result, current rates are held constant. The most influential factor in the level of natural increase is the age structure. As the baby boom population moves out of the childbearing years, the number of births will decline somewhat and natural increase in the population will decline.

In absolute terms, natural increase in the GTA is expected to be at a post-war high during the 1990s, then decline sharply during the remainder of the forecast (Exhibit 15). The age structure effect on natural increase will be even more dramatic after 2031, the period when the mortality rates associated with old age begin to affect the largest cohorts of the baby boom generation.

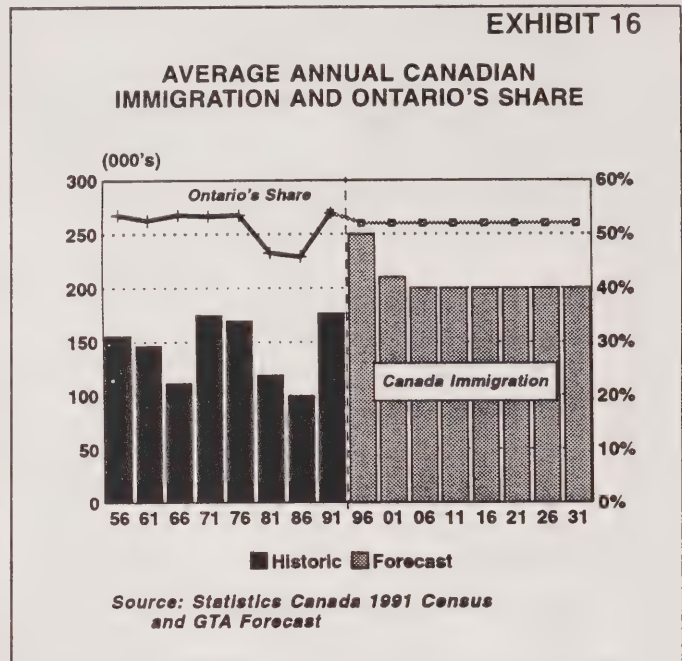


2. Migration Plays A Key Role In The Future Growth In The GTA

Migration to the GTA is anticipated to be a key source of population growth in the future as it has been in the past. With a declining natural increase in the population, migration will account for an increasingly large proportion of population growth.

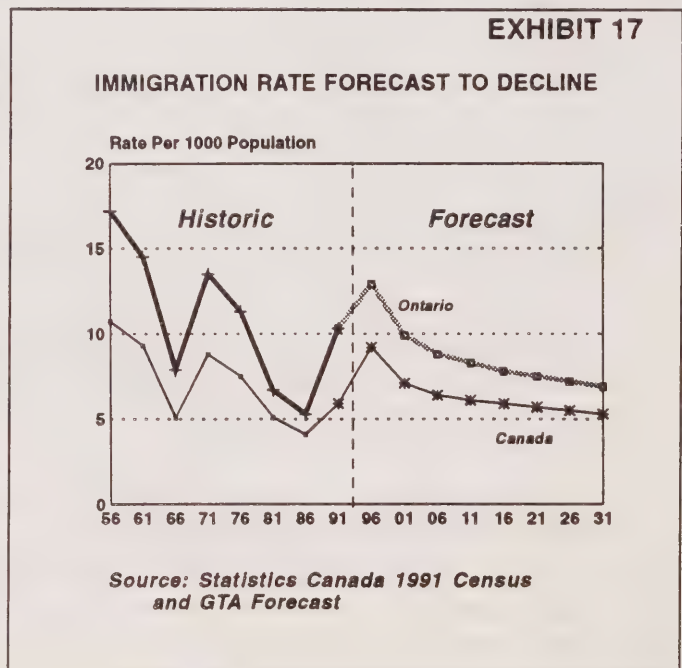
While migration is made up of a number of components, two are particularly critical in considering total migration for the purpose of this forecast. These are the level of immigration into Canada and the level of migration from the GTA to the rest of Ontario. The inter-provincial migration is a minor component.

In terms of immigration to Canada, the current high levels of immigration, set by federal policy, are fixed through to 1995. Immigration assumptions after 1995 are considered in a national context and balance a number of forces that alternatively suggest both increased and decreased levels (Exhibit 16). Forces suggesting lower levels of immigration are based on concerns about the ability of the economy to expand in response to the arrival of immigrants and to concerns about the ability of the GTA to assimilative continuing high levels of foreign immigration.



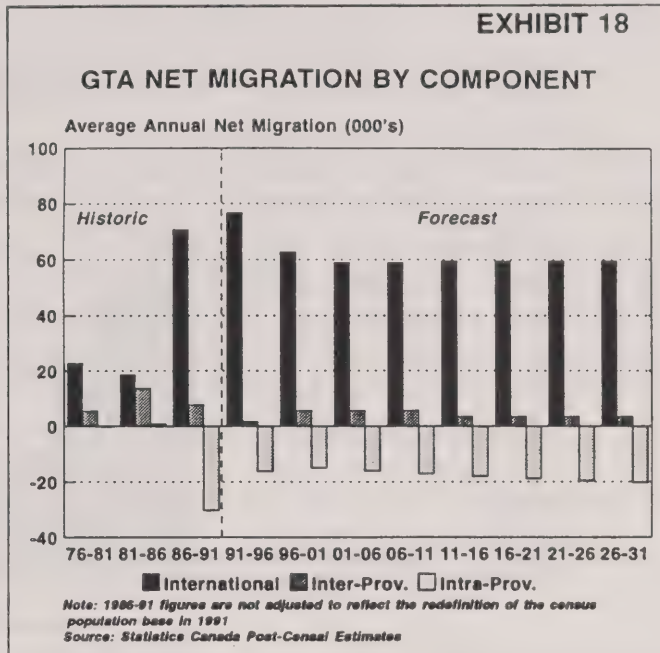
Conversely, there are also a number of demographic and economic pressures favouring immigration, such as an aging population, a decreasing proportion of the population of working age, and declining labour force growth. These factors, which will have far-reaching implications for tax revenues, social program spending and pensions, are far more apparent in other parts of Canada, since the average age of the population nationally is older than in the GTA.

While the immigration levels may appear high

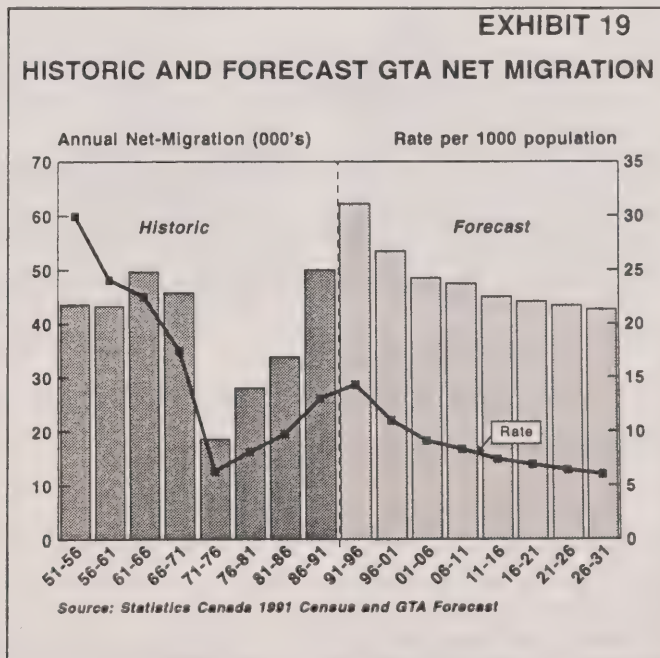


in absolute terms, the *rate* of immigration reflected by these forecasts is significantly reduced from current levels. (Exhibit 17).

The other important factor in forecasting population for the GTA is the movement out from the GTA to other parts of Ontario. While this has not been an important factor historically, a high level of out-migration occurred during the boom period in the late 1980s. It is likely that housing affordability constraints in the GTA pushed migrants into areas adjacent to the GTA. A continued movement out from the GTA to other parts of southern Ontario is forecast, though at a lower level than recently experienced.

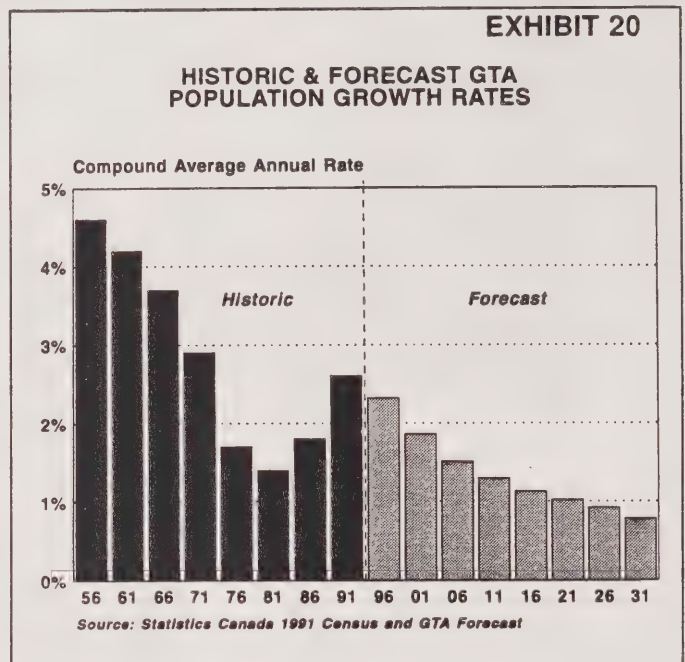


Total migration to the GTA by component (Exhibit 18) shows the importance of international migration to the overall total and how it is balanced by out-migration to other parts of Ontario. The resulting forecast shows total net migration in terms of the absolute average annual migration with the migration rate per 1,000 population expected to peak during the 1991-96 period and decline for the remainder of the forecast (Exhibit 19).



3. Rate Of Growth Will Moderate Significantly Towards End Of Forecast Period

The forecast anticipates slowing rates of population growth during the forecast period (Exhibit 20). This is primarily the result of a declining level of natural increase in the population for which anticipated migration levels do not compensate. Even if the absolute levels of growth remained the same throughout the forecast, the *rate* of growth would decline due to the ever-larger base population to which the new population is being added.



B. **HOUSING GROWTH WILL MODERATE SIGNIFICANTLY EARLY IN NEXT CENTURY**

As shown on Exhibit 1, Long Term Forecasting Methodology, housing growth is first determined by forecasting the total number of households that will be formed, and secondly, by distributing these households to a housing structure type⁸. A forecast by unit type is important as the ability of various portions of the GTA to accommodate additional residents, is dependant upon the type of housing that needs to be accommodated.

⁸ The housing forecast uses Census definitions of single-detached, semi-detached, rowhouses and apartments.

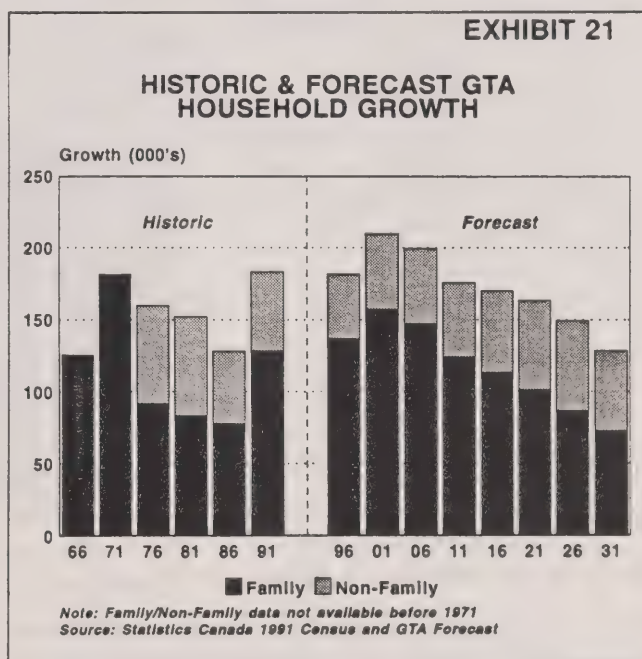
1. Household Growth Patterns Are The Result Of Population Age Structure

The older a population age structure, the more households a fixed level of population creates. This is because an older population has an increasing number of single person households. Thus, the aging of the GTA population means that additional housing will need to be created to house the current population.

The forecast assumes that the rate of formation of family and non-family households⁹ for each age group will be at current levels over the long-term. In the short-term (1996 and 2001), the rates have been adjusted slightly downward to account for the effect of higher levels of core unemployment forecast through the 1990s. The household formation rate of young people is particularly affected by economic cycles. During hard times, the young remain with their parents longer or live in larger groups than would be the case in stronger economic periods.

Demographics suggest that 1990s housing growth should be concentrated in the early part of the decade. The adjustment in headship rates for the current economic cycle has the effect of spreading 1990s' housing growth more evenly over the decade.

The age structure also affects the type of households forecast (Exhibit 21). Absolute growth in family



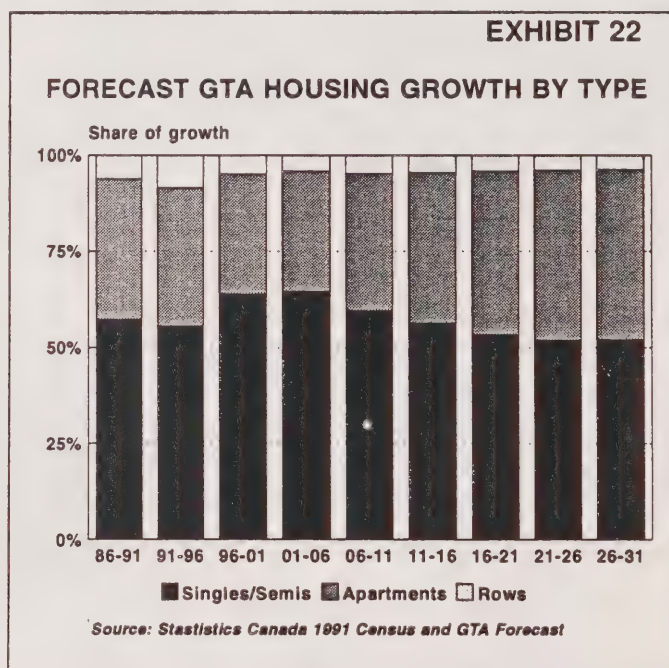
⁹ Family household refers to a household that contains at least one census family, that is a married couple with or without never-married sons or daughters, or a couple living common-law with or without never-married sons or daughters, or a lone parent living with one or more never-married sons or daughters. Non-family household refers to either one person living alone in a private dwelling, or to a group of two or more people who share a private dwelling, but who do not constitute a census family.

households will be at historic highs until after 2011. This proportion of family households has a critical impact on the housing growth by type, since family and non-family households have very different housing type needs and desires.

2. Population Age Structure Favours Ground-Related Housing

As discussed in Chapter III, the baby boomers are currently in the age groups that are most likely to seek out ground-related housing. In the forecast, the age-specific occupancy patterns are assumed to be constant in the long term. This assumption of constant rates suggests policy is successful in reversing the current occupancy trends. Current trends show increasing occupancy of single-detached housing by nearly every age group of both family and non-family households.

As a result of the constant age-specific occupancy pattern assumption, the forecast indicates an increasing proportion of housing demand for ground-related units (and a decreasing proportion of demand for apartment units) up to 2006, with a decline for the rest of the forecast period (Exhibit 22). This change in proportion is purely the result of the age structure of the population. This is the same phenomena which produced high levels of apartment construction during the late 1960s and early 1970s, when the baby-boom was in the age groups favouring occupancy of apartment units.



In any given short term period there can be wide variations in the types of housing units built due to economic cycles, affordability, availability of government housing programs and other factors which influence the housing construction. However, over the longer-term, the major shifts that have occurred in the housing market have occurred due to changes in the age structure and the household composition of the population.

C. EMPLOYMENT WILL INCREASE TO 3.8 MILLION BY 2021

Total employment in the GTA is forecast to rise from the 1991 level of 2.3 million to 3.8 million by 2021. In keeping with the population growth forecast, employment growth is expected to be concentrated in the first twenty years of the forecast. However, the pattern of concentration of growth early in the 30 year forecast period is more exaggerated for employment growth than for population, due to the retirement of baby boomers during the period after 2011. Of the 1.5 million employment growth over 30 years, about 40 per cent is expected in the first decade and only 25 per cent occurs in the last decade. After 2021, employment growth is very modest.

Year	GTA Employment (millions)	Growth Rate (compound annual)
1956	0.7	---
1971	1.2	3.7%
1981	1.8	4.2%
1991	2.3	2.3%
2001	2.9	2.3%
2011	3.4	1.6%
2021	3.8	1.1%
2031	4.0	0.6%

The relatively low growth in the 1981-91 decade compared to the 1971-81 or 1991-2001 decade is largely the result of the recession. Had the Census been taken in 1990 instead of 1991, the growth rate for the last decade would have been 3.0 per cent and for the period to 2001, 1.5 per cent.

The forecast of GTA employment is prepared within the context of the economic outlook discussed in the previous chapter. Three key assumptions determine the forecast for the GTA: labour force participation rates; the unemployment rate;

and levels of net in-commuting into the GTA from the GTA Hinterland. Demographic, social and economic factors are used to prepare the age and sex-specific participation rates which are then applied to the population forecast to determine labour force. Applying the unemployment rate to the labour force determines the employed labour forecast and, finally, the addition of net in-commuting provides total GTA employment. The assumptions are summarized in the table below and discussed in the following sections.

KEY ASSUMPTIONS FOR GTA REFERENCE EMPLOYMENT FORECAST	
Labour Force Participation Rates	<p>Age-specific rates for males are generally forecast to remain near current rates with some decline for those in their 50s who may opt for early retirement.</p> <p>Age-specific female rates for those under 40 are generally forecast to remain near current levels. Rates for women over 40 continue to increase as the high-participation younger age groups, age over the next 30 years.</p>
Unemployment Rate	Unemployment rate forecast to decline from current 1993 levels of about 10 per cent to 8.5 per cent by 1996 ¹⁰ , and gradually downward to 3 per cent by the end of the forecast period when a labour shortage is likely due the population age structure.
Net In-Commuting	Forecast to grow at the same rate as total employment from the current level of 75,000.

1. Employment Forecast Based On Economic, Social And Demographic Factors

The forecast is generally based on continued economic growth over the long-term. This outlook for economic activity is explicitly factored into the three key assumptions. The age and sex-specific labour force participation rates are based largely on social and demographic patterns, the most important of which concerns female participation rates. Younger women currently in the labour force are expected to stay in the labour force through to retirement.

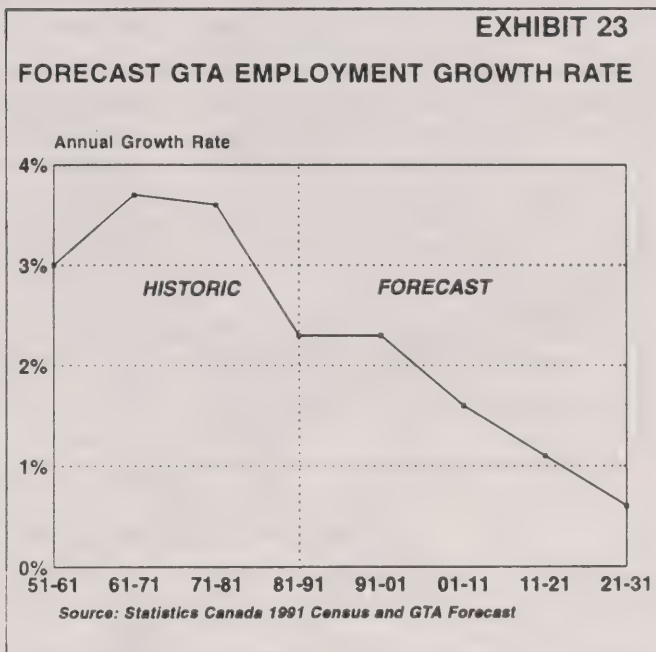
¹⁰ The forecast uses the Census definition of labour force and unemployment which shows a rate lower than the Monthly Labour Force Survey (rates quoted in the media). The 1996 forecast rate of 8.5 per cent is estimated to be equivalent to about 9.7 per cent from the Labour Force Survey.

Unemployment rates, as forecast, reflect economic restructuring through the rest of this decade (as discussed in the previous chapter). After 2011 and especially after 2021, labour force shortages brought on by the retirement of the baby boom generation are anticipated to strongly decrease the unemployment rate.

Net in-commuting, the third key assumption element, is minor in the larger employment picture. This factor is determined by subtracting the number of GTA residents who commute to jobs outside of the GTA from the number of people who reside outside the GTA and commute in. The level of commuting -- both ways -- has increased over the past decade. This is consistent with the pattern of population migration out from the GTA to

nearby areas such as Barrie and Guelph, within commuting distance of the GTA. As continued migration to the areas immediately beyond the GTA is forecast, net in-commuting is expected to grow at the same rate as the resident employed labour force and, accordingly, will account for a constant share of about 3.3 per cent of total GTA employment. The

resulting forecast of employment indicates declining growth rates as the population ages and the population of working age grows very slowly (Exhibit 23).

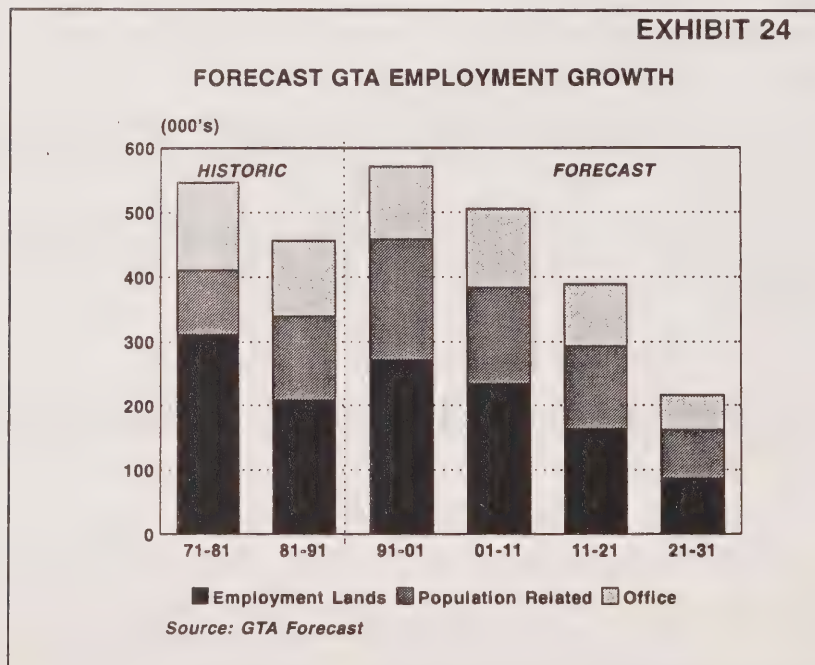


2. Employment Growth In Major Office Buildings Anticipated To Moderate

In order to gain a better understanding of where in the GTA employment growth may occur in the future, total employment is divided into three conceptual categories based on land use. The three categories -- major office, population-related, and employment lands -- are defined along with the outlook for each category in the table below.

Category	Definition	Forecast Assumption
Major Office	Employment occurring in major office buildings (those over 20,000 sq. ft., excluding municipal offices).	Historically, major office employment has grown faster than overall employment. The category is dominated by government and financial services: sectors that will continue to restructure through the 1990s. It is anticipated that major office employment will grow at the same rate as total employment in this decade, then return to a slightly faster rate of growth than total employment after 2001.
Population-Related	Employment occurring in response to a resident population. Consists mainly of municipal, educational, medical, institutional, retail and home occupations and is distributed throughout the community.	Population-related employment as a ratio to population has declined recently due primarily to shrinkage in the retail sector and restructuring pressures in local government and health care. It is anticipated to remain at the same ratio to population for most of the forecast period (5.2 people generate one population-related employee).
Employment Lands	Employment occurring in land-extensive employment areas. No longer "industrial" areas, employment lands usually contain a wide range of non-industrial activities.	The employment lands employment accounts for about 45 per cent of total employment. Its share of growth is expected to rise in the short-term (compensating for the slower growth in the office sector and because these lands are the most attractive location for new firms), then decline slightly as office growth accelerates in the longer-term.

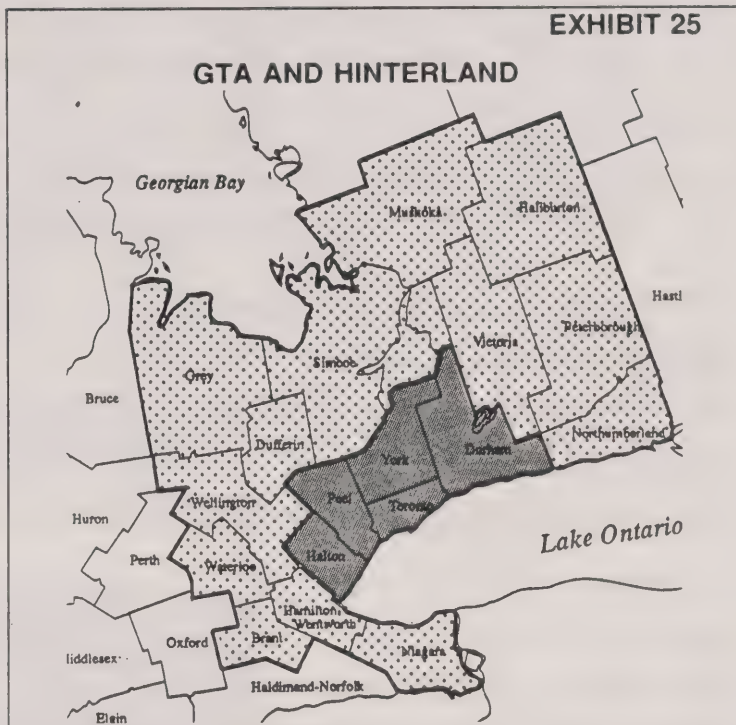
While some shift in the categories is forecast, the shares of total employment in each category are not forecast to change dramatically (Exhibits 24).



V GTA HINTERLAND EXPECTED TO ADD 1.4 MILLION PEOPLE

In conjunction with the GTA forecast, a forecast was prepared for the GTA Hinterland, which consists of the regions and counties surrounding the GTA (Exhibit 25).

Population growth in the Hinterland, like the GTA, is driven both by natural increase and by migration. However, the major source of migrants in the Hinterland is not

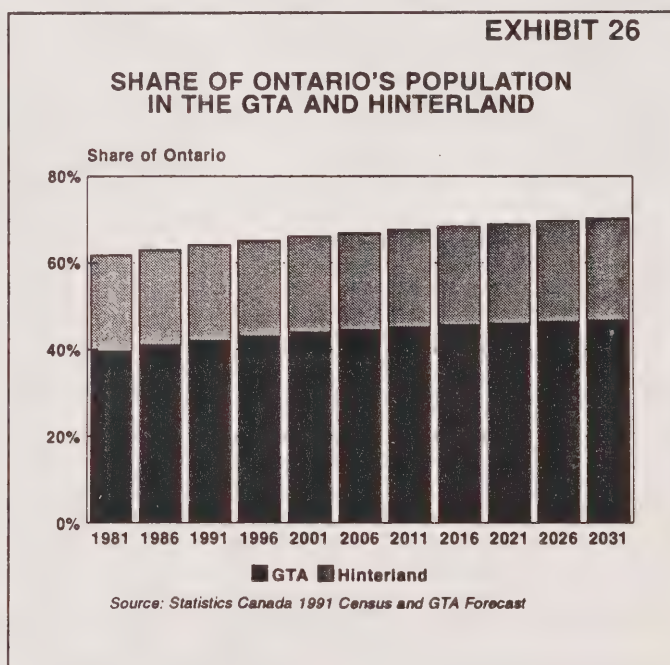


international but is predominantly intra-provincial migration, people moving to the Hinterland from the GTA. The number of in-migrants to the Hinterland is largely the same as the forecast for out-migrants from the GTA. This high level of migration results in substantial population growth in the Hinterland and a faster rate of population growth than in the GTA. The assumptions used in the

Hinterland forecast are consistent with the assumptions used in the GTA forecast¹¹.

Year	Hinterland Population (millions)	Growth Rate (compound annual)
1981	1.9	---
1991	2.2	1.5%
2001	2.6	1.6%
2011	3.0	1.3%
2021	3.3	1.1%
2031	3.6	0.9%

The forecast for both the GTA and the Hinterland suggests a gradually increasing share of Ontario's population will reside in this area (Exhibit 26). The GTA and the Hinterland collectively are forecast to rise from the current level of 64 per cent of Ontario's population to about 69 per cent by 2021. This reflects a continuation of the pattern of a gradually increasing concentration of population in the urban centres of south-central Ontario.



¹¹ These include constant 1991-level fertility and mortality. Migration assumptions for the GTA and the Hinterland reflect consistent levels of immigration, inter-provincial migration and intra-provincial migration as the GTA forecast.

VI RANGES OF GTA AND HINTERLAND FORECASTS ALSO PREPARED

While this report focuses on the "Reference" scenario, a forecast range was prepared to reflect different views on immigration and the ability of the GTA to create jobs. For the GTA, the least predictable major assumption in the population forecast is the level of migration. The Reference Forecast assumes moderate levels of economic growth which maintain a reasonably high level of attractiveness of Canada and the GTA for migrants.

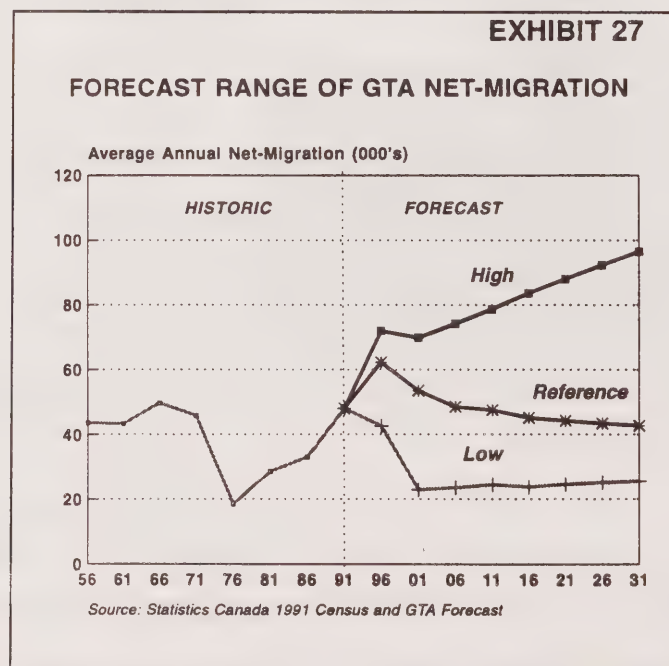
Two additional forecasts were prepared. The Low Forecast reflects a situation where future economic growth and job opportunities were more constrained, making the GTA less attractive to migrants. The High Forecast is based on more rapid economic growth and a much more attractive Canada, Ontario and GTA for employment opportunities.

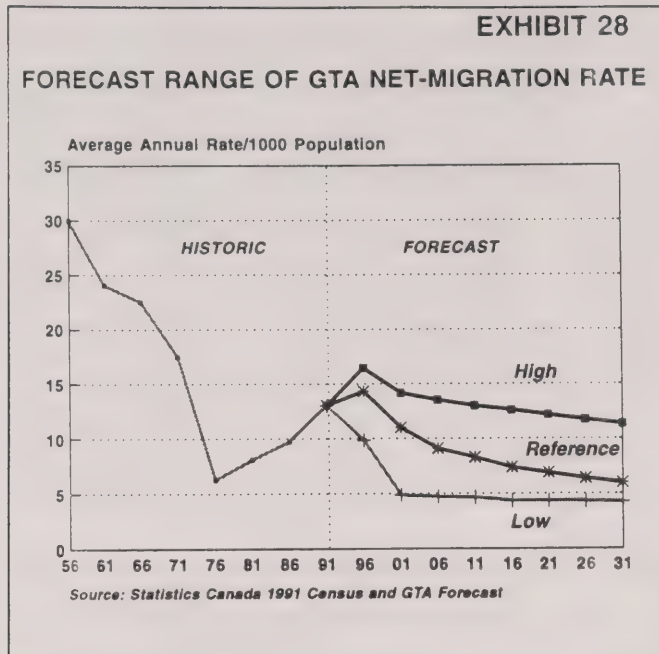
The purpose of developing these two alternative scenarios is to place outside parameters on the Reference Forecast. These parameters are useful for consideration of the consequences of planning for too low or too high a growth figure. The forecast range also addresses a number of questions regarding the range of results if sensitive variables, such as Canada's immigration policies, were substantially changed.

The range on the forecast is the result of changing two key assumptions for population and employment (as described in the following table) which reflect the economic contexts for the Low and High Forecasts.

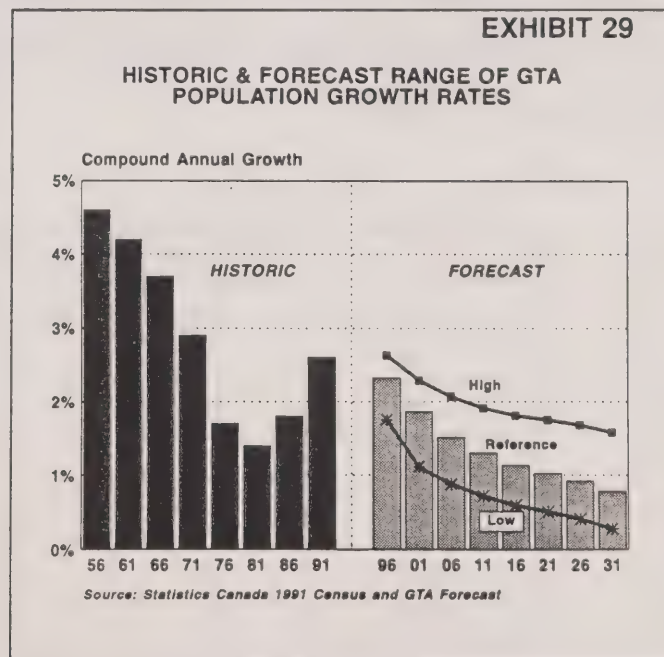
KEY ASSUMPTIONS DEFINING THE LOW AND HIGH FORECAST RANGE		
Assumption	Low Forecast	High Forecast
Migration	Canada immigration at current policy of 250,000 annually to 1996. After 1996, 5.2 per 1000 population (the lowest average rate by decade of the post-war period). Results in increasing levels from 150,000 in 1996-2001 up to 175,000 in 2026-2031.	Canada immigration at current policy of 250,000 annually to 1996. After 1996, 7.8 per 1000, the average Canada rate for the 1951-1991 period. Results in increasing levels from 225,000 in 1996-2001 to 310,000 by 2026-2031.
Unemployment Rate	Higher rates than the Reference Forecast over the entire forecast period, consistent with the economic context for the Low Forecast (the inability of the GTA to adjust to changing economic circumstances).	Lower rates early in the forecast period as the GTA responds quickly to structural change, then continued levels consistent with economic context for a High Forecast for the remainder of the period.
Participation Rates	Remain at current low recession-induced levels to 1996 and return to 1991 rates by 2001. Increasing female participation after 2001.	Return to pre-recession participation rates by 1996. Increasing female participation after 1996.

These assumptions result in a range of migration and migration rates for the Reference, Low, and High Forecasts (Exhibits 27 and 28).





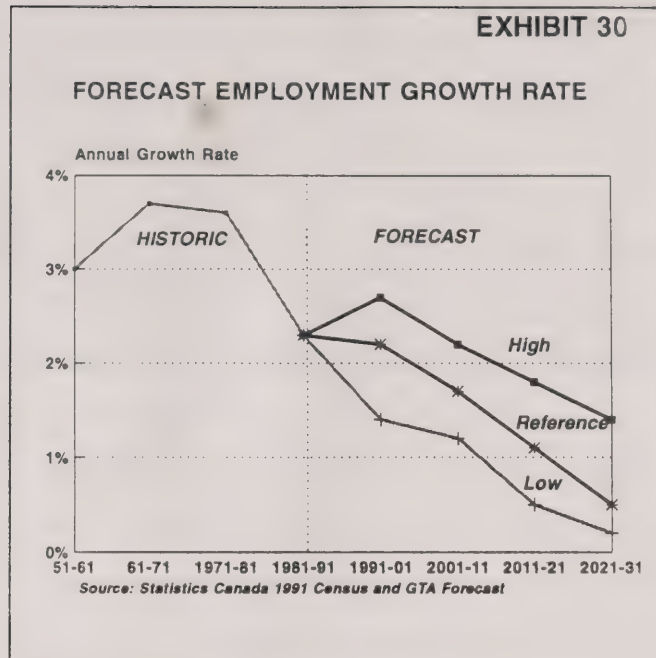
These assumptions for migration and employment provide a forecast for population and employment ranges for the GTA and Hinterland plus the GTA employment levels shown in the charts below. These alternative levels of population growth also result in a wide variation on the growth rates in population (Exhibit 29).



Year	GTA Population (millions)			Hinterland Population (millions)		
	Low	Reference	High	Low	Reference	High
1981	3.4	3.4	3.4	1.9	1.9	1.9
1991	4.2	4.2	4.2	2.2	2.2	2.2
2001	4.9	5.2	5.3	2.5	2.6	2.7
2011	5.4	6.0	6.5	2.8	3.0	3.2
2021	5.8	6.7	7.7	3.0	3.3	3.7
2031	6.1	7.3	9.0	3.2	3.6	4.2

Using the range of forecast population as a basis for the labour force estimates and applying the range of unemployment rates associated with the economic basis of the forecast range, a range on the employment forecast was prepared. The effect of the age structure on the long-term labour force growth, discussed in Chapter IV, becomes clear in the Low Forecast. Even with the continued migration expected in the Low Forecast, albeit at lower levels than historically, total employment is forecast to experience virtually no growth in the 2021 to 2031 decade (Exhibit 30).

GTA Employment (millions)			
Year	Low	Reference	High
1981	1.8	1.8	1.8
1991	2.3	2.3	2.3
2001	2.6	2.9	3.0
2011	3.0	3.4	3.7
2021	3.1	3.8	4.4
2031	3.2	4.0	5.1



The forecast range could produce a GTA population of 5.8 to 7.7 million by 2021 and an employment range of 3.1 million to 4.4 million by 2021. These ranges reflect different economic outlooks for the GTA and are useful for considering the consequences of planning for too high or too low a growth figure.

VII WHERE IN THE GTA WILL THE GROWTH OCCUR?

Where the growth within the GTA will occur is dependent upon which areas in the GTA can accommodate the kind of growth anticipated. The GTA forecast indicates that the housing market will be dominated by demand for ground-related housing and the job growth focused on the employment lands. Much of this development is typically accommodated on newly developing land, unlike apartment and office developments which often occurs as redevelopment. A continuation of this pattern of housing and employment demand ensures that most of the growth will occur in the four Regions outside Metro Toronto.

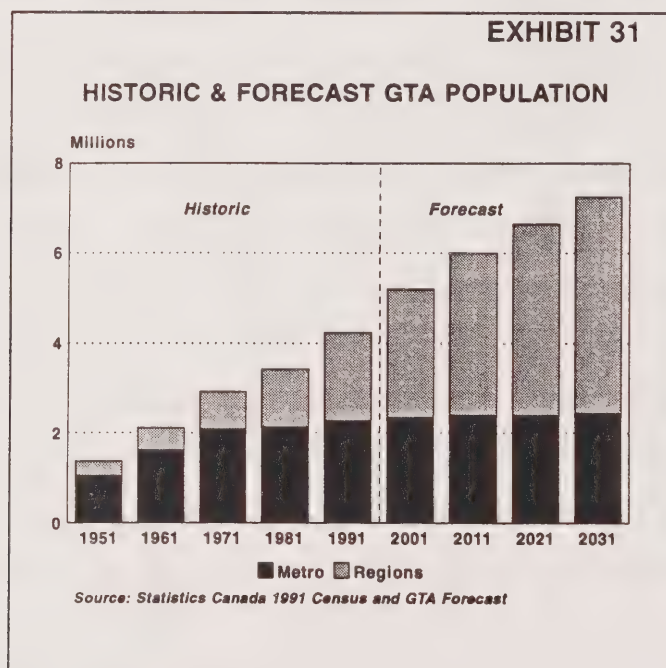
A. MOST OF THE POPULATION GROWTH WILL CONTINUE TO OCCUR IN THE FOUR REGIONS

Over time, an increasing proportion of GTA population growth has been occurring in the four Regions outside of Metro Toronto. Metro has not accommodated more than half of GTA population growth since the 1960s. This pattern coincided with the exhaustion of Metro's supply of greenfield development lands for housing.

The ability of a municipality to provide land to accommodate new housing is the critical factor in distributing the demand for new housing among Metro and the Regions. The exhaustion of raw development land has resulted in the most pronounced shifts in the pattern of development in the GTA in the past. During this forecast period, only the southern portion of Peel Region will experience a marked decline in development activity as a result of the regional land supply situation. The distribution of new housing, in turn, provides the basis for determining the forecast population growth for Metro and the Regions. The

assumptions regarding shares of future housing growth, discussed in the following sections, result in the forecast regional populations provided in the table immediately following¹². The major share of the population growth is forecast to occur in the Regions beyond Metro (Exhibit 31).

GTA POPULATION BY REGION (000S)						
Year	Metro	Peel	York	Durham	Halton	GTA
1961	1,620	110	110	150	110	2,110
1971	2,090	260	170	210	190	2,920
1981	2,140	490	250	280	250	3,420
1991	2,280	730	500	410	310	4,240
2001	2,380	1,000	800	610	420	5,210
2011	2,390	1,190	1,060	810	550	5,990
2021	2,410	1,320	1,290	970	670	6,670
2031	2,460	1,430	1,480	1,110	790	7,260



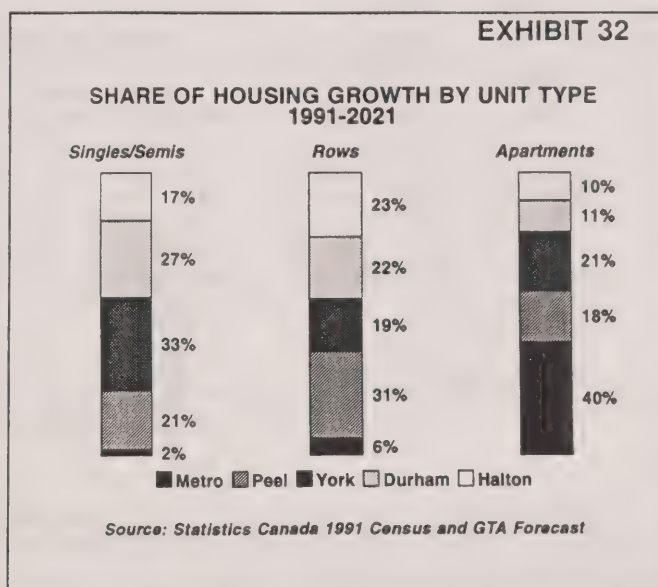
¹² Population is forecast for each region by adding new housing to the existing base of housing, then applying an average household size to determine a total population in households.

1. Shares Of New Housing Allocated According To Unit Supply Potential And Local Demand Factors

New housing in Metro and in each of the Regions is forecast according to a share of demand for new housing by housing type. The key factor in housing growth among the areas is a diminishing share of the market for all housing types in Metro Toronto. For the ground-related types, the share decline reflects a diminishing vacant land supply capable of accommodating the units. For apartments, however, the forecast has little to do with Metro's ability to redevelop but rather reflects a continuation of current trends toward a more diverse housing mix in the four Regions.

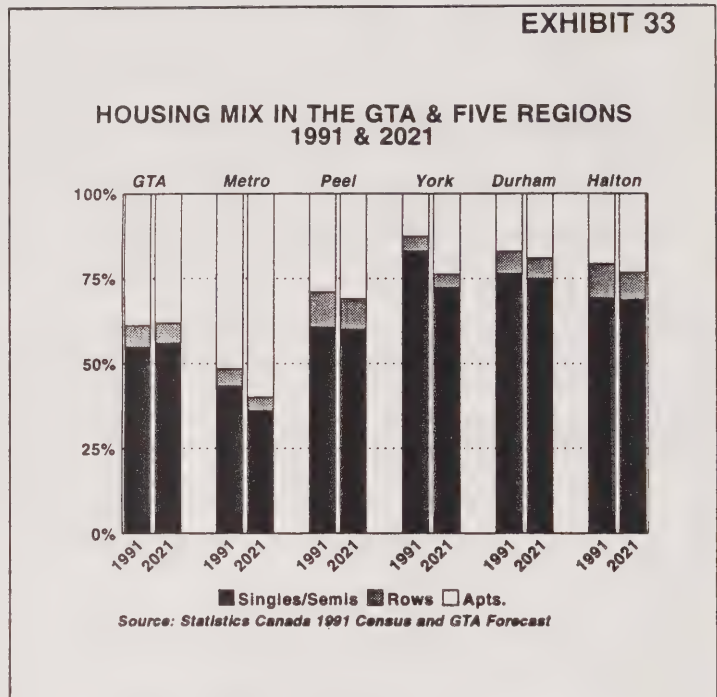
KEY ASSUMPTION FOR REGIONAL POPULATION IS SHARE OF HOUSING GROWTH BY TYPE	
Single Detached/ Semi-Detached	Metro share forecast to decline from current 6 per cent share to 1 per cent as remaining land is exhausted - declines mainly picked up by Durham as the remaining Metro land is in Scarborough and is considered part of the eastern metropolitan market. Shift in west market from Peel to Halton once Mississauga nears full development during the next decade.
Rowhouses	Shares forecast to remain at current levels in Metro, Durham and Halton. Declines in Peel from disproportionately high current shares. Increases in York as it develops a more diverse housing stock.
Apartments	Metro share forecast to decline from current 58 per cent share to 30 per cent by 2021, due to increasing shares in all other Regions as they develop more diverse housing stocks.

Even the declining share of housing growth in Metro still results in a large total share of the apartment market (Exhibit 32). While it is assumed more apartment units are built in the four Regions than currently, the continued relative concentration of this development in Metro results in a dense housing mix in Metro by 2021 and a gradual

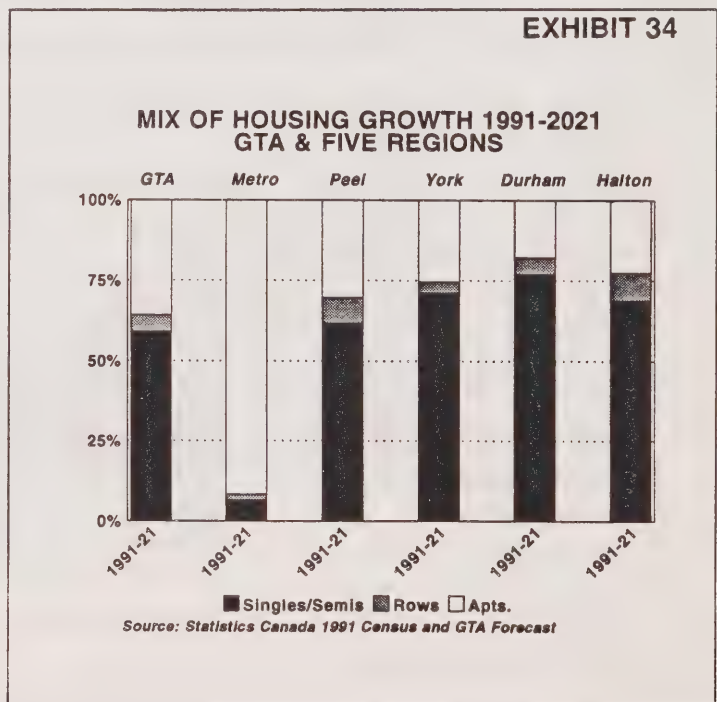


change to a more diverse housing mix in the four Regions (Exhibits 33 and 34).

Metro's share of new apartment units is forecast to decline. The change has little to do with Metro but has very much to do with the maturing of the regions around Metro. While most of the Regions' housing stock have a low apartment component now, as they mature into more urban communities in future, they will develop a more diverse housing stock.



Compounding this pattern is that much of the apartment demand in the future is generated by the elderly, who typically seek an apartment unit within the same community as their previous family housing unit.



2. Declining Household Size Reduces Population Within The Existing Stock

The age structure of the population and the household formation rates by age mean that the average household size will continue to decline throughout the forecast period. As a result, the existing housing unit stock will accommodate a smaller and smaller population over time¹³. For example, the 1991 Metro housing stock will accommodate a population of about 11 per cent fewer people in 2021 than in 1991. Just to keep its current population during the forecast period, Metro would need to add over 110,000 additional housing units.

The average household sizes for the Regions, shown below, applied to total households provides the total population in households in each time period¹⁴. The addition of a factor for non-household population residing mainly in institutions (about 1½ per cent of GTA population in 1991) produces the final population figures provided at the beginning of the chapter.

Average Household Size By Region						
Year	Metro	Peel	York	Durham	Halton	GTA
1971	3.3	3.7	n/a	n/a	n/a	3.4
1981	2.7	3.2	3.3	3.1	3.1	2.9
1991	2.6	3.2	3.3	3.0	2.9	2.8
2001	2.5	3.1	3.2	2.9	2.8	2.7
2011	2.3	2.9	3.0	2.7	2.7	2.6
2021	2.3	2.8	2.8	2.6	2.6	2.5
2031	2.2	2.8	2.8	2.6	2.5	2.5

¹³ For purposes of the forecast, new units created from the existing physical stock such as accessory apartment units are counted as new units.

¹⁴ The total average household size for the GTA is the direct result of the household headship rates. The average household size for the regions is determined for each of the four unit types (single, semi, row and apartment), starting with the known 1991 size, by reducing the average household size in future years in proportion to the decline in total average household size for the GTA.

Most of the GTA's population growth is expected to continue to occur in the four Regions over the forecast period, just as it has in the past 20 years. While Metro will still experience significant housing growth, the trend in declining household size will continue and tend to keep Metro's population lower than might otherwise be expected.

B. MOST EMPLOYMENT GROWTH WILL ALSO CONTINUE TO OCCUR IN THE FOUR REGIONS

In recent years, most employment growth has been occurring in the four Regions outside Metro. This pattern has coincided with: Metro exhausting its supply of greenfield employment lands; growth in population needing services in the Regions; and the establishment of a significant office market outside of Metro. Employment is distributed to the Regions on the basis of shares of the three employment types: major office, population-related and employment lands. In preparing the share forecasts three important trends in the regional patterns of employment growth were considered.

1. Continued Trend To More Balanced Communities Is Likely

The perception of the relationship between the four Regions and Metro has been that of bedroom communities full of central city commuters. While this may have been the case 20 years ago, the Regions are becoming increasingly balanced between population and employment. In 1991, Toronto, Mississauga, Vaughan and Markham all had employment levels exceeding the number of working residents (i.e. communities with net in-commuting). Major concentrations of employment (GTA-wide commuter destinations), are therefore no longer exclusive to the central city.

The Regions are increasingly developing an employment base that is closer in size to their resident labour force. This is the result of a variety of forces, particularly: availability of a labour force which attracts employers to the Regions; land economics of older employment areas; and congestion limitations for both labour and goods. The emerging pattern may provide

the *opportunity* to reduce long distance commuting as the central city/bedroom community model of urban structure becomes increasingly unsustainable for a large and expanding metropolitan area.

2. Office Employment Will Continue To Suburbanize

Historically, Metro's share of the market has declined as the Regions, particularly Peel, have established major office markets of their own. These trends are forecast to continue. Peel and York are anticipated to have the largest share of the market outside Metro since they have the largest market base, currently focused on Mississauga and Markham.

Shares Of Major Office Employment Growth By Region					
Period	Metro	Peel	York	Durham	Halton
1971-81	84%	9%	1%	2%	4%
1981-86	76%	12%	10%	<1%	2%
1986-91	56%	27%	14%	1%	2%

The establishment of major office markets in the Regions is a logical extension of both the growth in population and employment. Many users of major office space provide higher order services to both the population and the business community. Office users will increasingly want to locate where it is convenient for their client base. Other large office space users, without specific client bases, such as data centres, often locate on the basis of labour force availability. Further pushing firms to the Regions are: the lower occupancy costs; the flexibility provided by modern space; the availability of parking; and other factors. All of these forces suggest a continued trend toward suburbanization of office growth in the future.

Although Metro's share of growth of the office market will decline, it will remain by far the most dominate office employment location in the GTA.

3. Employment Land Employment Is Dependent On Land Supply

The redevelopment of vacant industrial lands for new employment uses is the subject of intense planning policy considerations, largely because facilitating the re-use of these lands is exceedingly difficult. The economics of developing these properties for new uses and to meet current

development standards is a major constraint. Such redevelopment, when it does occur, at best compensates for declining employment densities in other areas. All available evidence suggests that the flexibility provided by development opportunities on raw land are a necessary condition for a community to have sustained growth in employment lands employment.

Metro's employment lands employment has grown little as its land supply has been exhausted. There was little growth in this type of employment in the early 1980s, a very significant decline in this employment during the 1986-91 period and further significant declines into 1992. Little new development has occurred to offset the declines in the existing base.

The employment lands problem and associated planning policy challenges for fully-developed municipalities will begin to occur in other communities during the forecast period. In particular, Mississauga will be near full development by the turn of the century and will then face some of the issues that Etobicoke and North York are facing today.

These trends, along with the economic outlook described in Chapter III, form the basis of the share assumptions which are described in the table below.

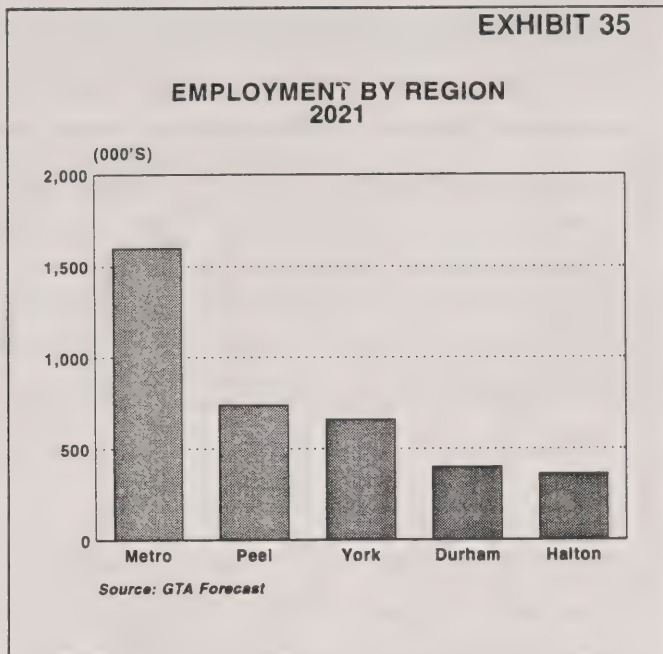
REGIONAL EMPLOYMENT DISTRIBUTED BY SHARE OF EACH EMPLOYMENT CATEGORY	
Major Office	Metro share of occupied office space forecast to decline from current 67 per cent of growth to 40 per cent by 2021, due to increasing shares in all other Regions as they establish a presence in the GTA office market, especially in the now-emerging nodes in Peel and York.
Population-related	Share of growth follows population growth to the Regions, though Metro maintains some growth in those central city functions serving the entire GTA, such as downtown retail, regional hospitals and universities.
Employment Lands	Metro share forecast to move from declining employment land employment to stable levels after 1996. Peel market share will decrease as Mississauga becomes fully developed. Some new development will shift to Halton. York forecast to decline from current disproportionately high shares of the market to about one-third of the GTA growth. Durham forecast to triple its currently small market share, as greater balance between population and employment growth is achieved.

The most difficult assumptions are those respecting the employment lands. The forecast assumes that the process of declining employment on the Metro employment lands and other now-aging employment lands elsewhere may now be approaching completion.

After 1996, Metro's employment lands employment is assumed to stabilize. This is an assumption that Metro will be able to have sufficient policy influence to ensure the redevelopment of significant areas of under-utilized employment land for new uses. Given the current development economics of these lands, this will be a significant challenge for Metro.

These distributions of the employment growth among Metro and the Regions result in the employment forecast shown in the table following. Metro is forecast to remain

by far the largest employment concentration in the GTA (Exhibit 35).



GTA EMPLOYMENT BY REGION (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
1971	1,000	100	60	80	60	1,290
1981	1,280	230	110	110	100	1,830
1991	1,370	380	250	160	140	2,290
2001	1,470	540	400	240	210	2,860
2011	1,550	660	550	320	290	3,370
2021	1,600	740	660	400	360	3,760
2031	1,620	780	730	440	400	3,970

For urban communities, a way of checking on the "reasonableness" of the forecast distribution is the relationship between population and employment. This

relationship is commonly shown as an activity rate, the ratio of employment to population. An index of forecast activity rates for Metro and the Regions is shown below. This indicates that Metro will continue to increase employment faster than population and remain strong as a commuter destination. However, the other Regions, will continue to provide net commuters to Metro.

GTA Activity Rate Index ¹⁵ By Region						
Year	Metro	Peel	York	Durham	Halton	GTA
1971	108	84	74	80	75	100
1981	112	89	80	72	74	100
1991	111	95	91	71	83	100
2001	113	98	92	70	91	100
2011	116	98	92	71	95	100
2021	118	99	91	72	95	100
2031	121	100	90	72	93	100

C. FORECAST DISTRIBUTIONS IMPLY AN OUTLOOK FOR EACH OF THE REGIONS

This chapter has highlighted a number of forces affecting the forecast distribution of population and employment in the GTA. On the basis of these forces and the forecast results, conclusions can be drawn on the general outlook for each of the Regions:

- **Metropolitan Toronto**

The forecast for Metropolitan Toronto contained in this report is for higher rates of population and employment growth than have recently been

¹⁵ Activity rate is the ratio of employment-to-population. Due to a variety of forces such as the age structure of the population and changing labour force participation rates, the activity rate for the GTA as a whole changes over time. In order to focus on the Regional relationships, the activity rate is re-stated as an index where GTA is 100 in all time periods. Regions where the index exceeds 100 have an activity rate higher than the overall GTA rate and Regions less than 100 have an activity rate less the GTA in total.

experienced. In order for these forecasts to materialize Metro Toronto will need to encourage a significant amount of residential intensification and re-use of its employment lands. This will be a very challenging in light of the over-riding economic, social and demographic factors dictating development trends over the next 30 to 40 year period. In this forecast, we are assuming that Metro will continue to be successful in deviating from the pattern of many major metropolitan areas in North America and Europe.

- **Peel Region**

While Peel will continue to grow through the entire forecast period, the nature of the Region will change significantly as Mississauga and, ultimately Brampton, reach full development. Some of the issues faced today by Metro will be the same issues faced by the southern part of Peel Region in the future.

- **York Region**

Due to the location of its development land, York is anticipated to continue a rapid rate of growth. This rate of growth is further stimulated by York's delayed development until the 1980s caused by lack of sewage servicing capacity. The stresses of ongoing growth will continue to be the major planning focus in York Region.

- **Durham Region**

Durham is expected to experience a significant level of both population and employment growth. Shares of employment growth are forecast to rise significantly. However, unlike the other regions of the GTA, it will continue to experience a less balanced population and employment relationship due to two key factors: the low activity rate from which it is starting; and, because one component of the Region, Oshawa, suffers from a serious restructuring problem.

- **Halton Region**

Of all the regions in the GTA, Halton is the one which will experience the greatest shift in its pattern of development once Mississauga exhausts its development land early in the next century. This will result in Halton facing new growth pressures.

VIII WHAT OTHER REGIONAL DISTRIBUTIONS OF GROWTH COULD OCCUR?

The last chapter presented a future distribution of population and employment within the GTA based on currently observed and anticipated economic, social and demographic factors. This is the pattern of development that the consulting team feels is the most likely to evolve with the implementation of current policy initiatives programs to alter the outlook. The most important of these current initiatives are reflected in assumptions that the employment decline that is occurring on employment lands will be stabilized in Metro Toronto and that the numerous intensification efforts will be sufficient to result in population growth in Metro. There are, however, a number of alternative scenarios which could be developed for the distribution of population and employment.

In order to provide increased understanding of the constraints imposed by current demographic and employment patterns, two alternative scenarios of regional growth distribution patterns were developed. The major differentiating feature of the alternative distributions of growth is the role to be played by Metro Toronto in accommodating future growth. Two scenarios have been developed: *Scenario One*, based on Metro Toronto accommodating an even larger component of growth; and *Scenario Two*, in which the evolving trend of Metro Toronto accommodating an increasingly smaller share of growth is continued.

Scenario 1 reflects a much more aggressive policy environment resulting in more significant intensification and, therefore, population and employment growth, in Metro than in the Reference Forecast. *Scenario 2*, based upon observed patterns in other major cities in the developed world, indicates a continuation of current

trends including the existing level of planning policy intervention in directing growth among Metro and the four Regions.

This chapter looks at population and employment distribution in the GTA based upon these two alternative distributions of the growth. For each scenario, the resultant population and employment forecasts are provided. In addition, some of the implications of these alternative scenarios are discussed. In each scenario only the distribution of growth is changed, the total population and employment levels remain the same as the Reference Forecast¹⁶.

A. INCREASING METRO ROLE IS A REVERSAL OF EVOLVING TRENDS

Scenario One, expresses the desire to make more effective use of the existing infrastructure in Metro Toronto by accommodating a larger portion of future growth within Metro Toronto. This scenario would create a more densely developed Metro Toronto, and would thus reduce the requirements for development lands in each of the four Regions.

1. Scenario One Is Defined By Alternative Population And Employment Levels

This scenario was developed by selecting population and employment targets for Metro Toronto. The target selected was a population of 2.7 million and an employment level of 1.8 million for the planning period to 2021. This represents a significant level of intensification in Metro. The total level of population and employment forecast in the Reference Forecast is maintained. The four Regions future population and employment levels are determined by distributing the remaining growth in a manner similar to the Reference Forecast.

¹⁶ Details of each of these scenarios are contained in the separately bound appendix.

GTA POPULATION BY REGION - SCENARIO ONE (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
Reference - 2021	2,410	1,320	1,290	970	670	6,670
Scenario One - 2021	2,700	1,260	1,110	950	650	6,670

The forecast populations are broadly consistent with other planning work currently underway in the GTA. Metro's proposed Official Plan suggests 2.5 to 2.8 million by 2011. The 2.7 million by 2021 falls within this range. The figures in Peel, York, Durham and Halton all reflect a consistency with the emerging planning objectives in these regions.

In terms of employment, this scenario would suggest a continuation of the concentration of employment within Metro (to make most efficient use of existing infrastructure, particularly the TTC and GO systems). Metro's proposed Official Plan has a goal of 1.8 million employment, up from the current 1.4 million. This figure is used in the analysis of *Scenario One*.

These population and employment targets would change the overall distribution of the population and employment growth to provide the results contained in the following two tables.

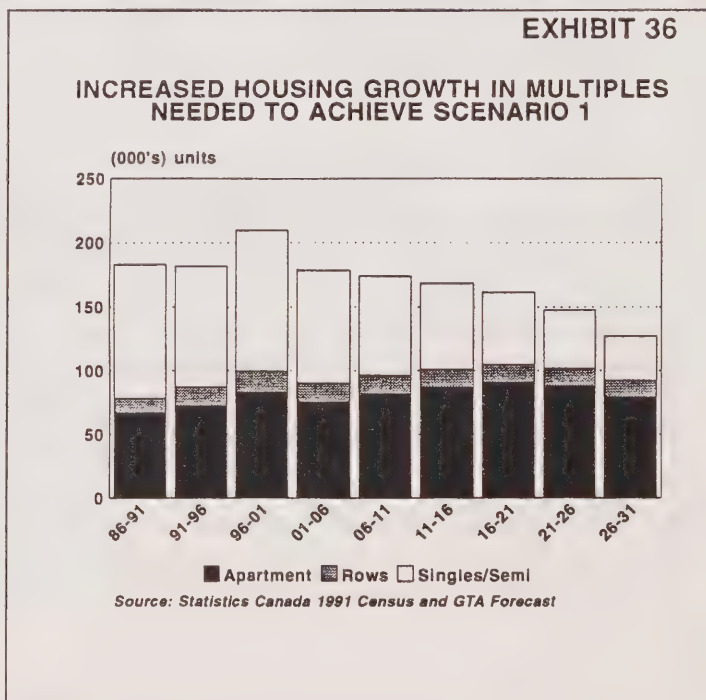
GTA Population By Region - Scenario One (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
1991	2,280	730	500	410	310	4,240
2001	2,420	990	780	610	420	5,210
2011	2,540	1,150	970	800	530	5,990
2021	2,700	1,260	1,110	950	650	6,670
2031	2,870	1,350	1,220	1,070	750	7,260

GTA EMPLOYMENT BY REGION - SCENARIO ONE (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
1991	1,370	380	250	160	140	2,290
2001	1,530	520	380	230	200	2,860
2011	1,680	620	500	310	270	3,370
2021	1,800	690	580	370	330	3,760
2031	1,870	720	620	400	360	3,970

2. Shifts Required In Both Housing Occupancy Patterns And Market Shares Required To Achieve Scenario One Population Targets

To achieve the population of 2.7 million in Metro, a number of changes would be required in the housing market. Shifts in both Metro's share of future housing growth and in the unit type occupancy patterns at the GTA level are required. To achieve the Metro population, simply increasing the market share of apartment-type units in Metro does not result in a realistic scenario. This change alone would result in a GTA housing pattern that would not reflect the more diverse housing mix that is evolving in the Regions in response to more diverse populations. As a result, to develop this scenario it has also proved necessary to shift the age-specific housing occupancy patterns away from the ground-related housing forms to apartment-type units.

The details of the scenario can be briefly summarized. To achieve the desired population in Metro, the future demand for single



and semi-detached units over the 1991 to 2021 period has been assumed to decline from 59 per cent to 47 per cent, while apartment demand would need to rise from 37 per cent to 46 per cent (Exhibit 36). This means that an additional 130,000 households (12 per cent) over the next 30 years would choose to live in apartment-type units (includes duplexes, triplexes, stacked townhouses, apartments over stores, as well as units in low and high-rise apartment buildings) as opposed to single and semi-detached housing units. In addition, Metro is assumed to retain its current share of apartment units in the 50 - 55 per cent range.

It will not be easy for Metro to accommodate this additional level of housing development. In order to accommodate this scenario, Metro would need to provide an additional 300,000 housing units, an increase of about 35 per cent over the 1991 housing stock. In Metro, an absence of raw land means housing growth must occur through various forms of intensification including: internal housing intensification such as accessory apartments; residential lot intensification; and neighbourhood consolidation such as conversion of non-residential uses, main street developments and more intensified development of under-utilized employment lands.

The scale of the intensification efforts required to increase Metro's housing stock by 300,000 units would require redevelopment of land area equivalent to the combined physical area of the City of York and Borough of East York¹⁷. Although this level of development could be physically accommodated there are a number of obstacles to achieving this magnitude of intensification. In many cases, owners have no interest in the redevelopment of their lands and in other cases land ownership patterns make it very difficult to assemble the required properties. The existing planning policies may not allow the required level of intensification, and residents and businesses may be strongly opposed. In other parts of Metro, the services, particularly the community and social services, may prove to be a major barrier. Under-utilized or disused industrial areas are a vital component of sites available for intensification. The unique problems of de-commissioning industrial sites and accommodating current development and community standards in the redevelopment of these sites will require special attention. To achieve this scenario, coordinated efforts by

¹⁷ The land estimate is based upon densities currently found in central Toronto plus current standards for neighbourhood facilities and local services, plus associated employment uses. The land area includes existing streets, parks, schools and community, transportation and utility facilities which would remain after redevelopment. The residential density would average 250 units per net residential hectare. This calculation only considers net new units, significant additional lands would also be required to replace existing units removed through redevelopment.

numerous public agencies, combined with wide spread public support will be required.

3. To Achieve The Employment Targets Of Scenario One Also Requires Major Shifts From Current Patterns

The employment target of 1.8 million in Metro represents a departure from the Reference Forecast. The Reference Forecast incorporates an assumption that Metro will be able to successfully stop the employment decline on employment lands. As indicated in the table below, *Scenario One* would require Metro to attract an additional 200,000 jobs over and above the increase in the Reference Forecast. Total employment increase in Metro Toronto under *Scenario One* would amount to 430,000 over 1991 levels, about a 30 per cent increase.

GTA EMPLOYMENT BY REGION - SCENARIO ONE (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
Reference - 2021	1,600	740	660	400	360	3,760
Scenario One - 2021	1,800	690	580	370	330	3,760

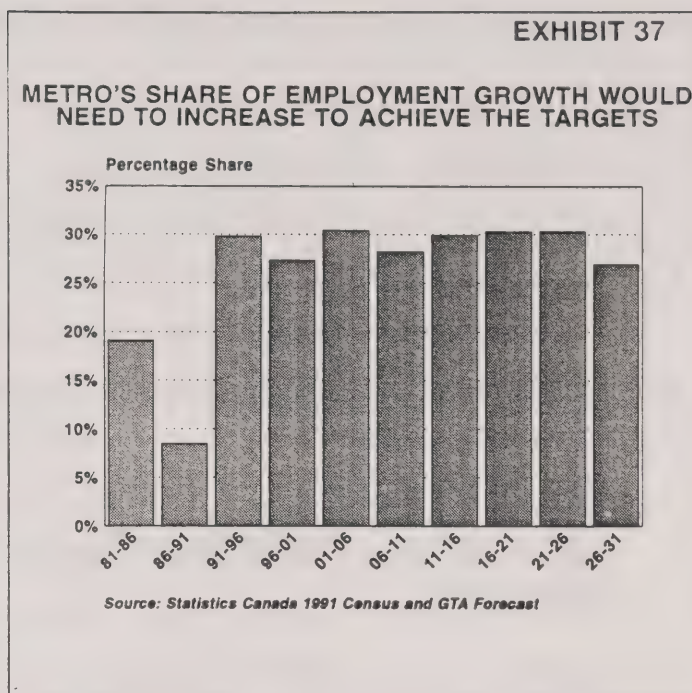
To achieve this employment scenario, Metro would require changes to both the pattern of suburbanization of the office market plus a reversal in the trend towards declining levels of employment on employment lands in Metro. To make this part of the scenario achieve the 1.8 million employment level in Metro, the scenario has assumed that Metro retains its current share of the office space market of about two-thirds and that Metro is able to obtain a share of 12 per cent of the anticipated growth in employment on employment lands. Both of these assumptions are major changes from the current pattern.

The office market has been rapidly moving to the Regions. In the 1971-80 period Metro had 84 per cent of the GTA office employment growth, by the 1986-91 period it had declined to 56 per cent¹⁸. The change in

¹⁸ The share of office employment during the recent period (56 per cent) is less than the share of the office space market (about two-thirds, noted in the previous paragraph) because of technological and recession induced increases in the average floor space per worker (FSW). When FSW increases, the space required to accommodate a given number of employees also increases. Growth rates in office space will therefore exceed growth in office employment.

employment lands requires an even more dramatic change. To achieve the employment target of this scenario would require that Metro's employment land employment growth shift from current absolute declines to an average, over the 30 year period, of 12 per cent of the GTA growth. Metro has not achieved this market share level since it

was developing large areas of raw land in the 1970s (Exhibit 37).



The GTA, like most other large urban areas, is experiencing a loss of industrial employment in older industrial areas and strong employment growth in developing areas at the fringes. This decline (accelerated but *not* created by the recession) is rooted in a number of factors ranging from access to labour force, congestion, obsolete buildings, higher occupancy costs including taxes, restrictive zoning, and an inability to redevelop sites to meet modern needs. The evolving initiatives by various agencies will need to contain policies and strong implementation programs if this trend towards larger shares of employment being concentrated outside Metro Toronto is to be reversed.

The shifts in population and employment represented by the targets under *Scenario One* may, on the surface, appear quite modest: about 12 per cent more population and 12 per cent more employment in Metro by 2021 than anticipated in the Reference Forecast. However, the changes away from current trends to achieve these targets are significant and will require strong policies and implementation programs if progress towards this scenario is to be achieved.

B. *SCENARIO TWO IS BASED ON TRENDS SEEN ELSEWHERE IN THE WORLD*

The second scenario developed in this report was a pattern of growth distribution that is based upon trends that are evolving in other cities in Europe and North America. The key trend that has been factored into this scenario is the pattern of an increasing portion of the metropolitan area's growth occurring at its fringes, with either stability or decline in more central areas. This pattern is already partially evolving in the GTA.

1. Trends In Other World Cities Suggest A Different Set Of Share Assumptions

Scenario Two distributes the forecast of GTA growth in accordance with the trends seen in other world cities. This scenario was developed based upon the extrapolation of trends exhibited elsewhere in the western world to the GTA. The key trends observed in other cities are:

- Central parts of metropolitan areas do not typically experience any significant population growth once the physical area reaches full development (e.g. Metro, Cook County (Chicago), New York City, City of Los Angeles, City of Paris and former Greater London Council area).
- Downtown areas can continue to be very attractive for employment growth, especially in offices and for some regional population-related employment growth. This is typical of Canadian, European and some U.S. cities (e.g. Chicago, New York, San Francisco).
- The areas within the developed central parts of metropolitan areas, but outside the downtown area, typically experience gradual population decline as they age, but experience much greater employment decline, particularly in industrial-type locations. Example areas would be the older inner suburbs such as Etobicoke and North York in Toronto; Brooklyn, Queens and The Bronx in New York; the City of Chicago outside the Loop/Magnificent Mile; and the former Greater London Council area outside Central London.

- Generating population or employment growth through redevelopment in most major cities typically takes a very long time to come to fruition and may not happen at all without major financial involvement by the public sector. Examples include Toronto's waterfront (Port, East Bayfront, Railway Lands, Ataratiri, Greenwood, Garrison Common, Etobicoke Motel Strip), London's Docklands, London's Kings Cross area, and New York's Battery Park City.

2. Results Are An Acceleration Of Patterns Developing Within The GTA During The Past Decade

The assumptions used in *Scenario Two* are defined in relationship to the trends used in the GTA Reference distribution. These include:

- A more rapid shift of housing markets to the Regions;
- An accelerated shift in the share of office employment growth that occurs in the Regions; and
- Continued declines from current levels in the amount of employment on employment lands in Metro Toronto.

Applying these trends would change the distribution of the population and employment growth to provide the following results:

SCENARIO TWO - GTA POPULATION BY REGION (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
1991	2,280	730	500	410	310	4,240
2001	2,340	1,010	810	620	430	5,210
2011	2,320	1,210	1,090	820	550	5,990
2021	2,320	1,350	1,320	1,000	690	6,670
2031	2,330	1,450	1,520	1,160	810	7,260

SCENARIO TWO - GTA EMPLOYMENT BY REGION (000s)						
Year	Metro	Peel	York	Durham	Halton	GTA
1991	1,370	380	250	160	140	2,290
2001	1,430	550	420	250	220	2,860
2011	1,450	680	580	350	310	3,370
2021	1,460	770	700	430	390	3,760
2031	1,450	820	780	480	450	3,970

The major difference in *Scenario Two*, from the Reference distribution is the stabilization of Metro's population and employment levels and an increased level of growth in the Regions. The forecast population and employment under this scenario produces a higher activity rate in the four Regions than the Reference Forecast so that less long distance commuting would occur. Unlike *Scenario One*, this outlook requires no major changes to current trends for it to evolve. Without a continuation of existing or strengthened policies assumed in the Reference Forecast this pattern could evolve.

This chapter has presented a brief discussion of two alternative regional distributions of the population and employment forecast future growth of the GTA. These scenarios provide some understanding of the changes required to alter current patterns. They also point out that there may be some barriers to achieving patterns different from evolving trends.

IX CONCLUSION

The long-term outlook for the GTA in 1993 remains similar to the outlook forecast in 1989. The cyclical recession, combined with the ongoing restructuring of the economy has significantly changed the short-term outlook for employment but not for population growth. Currently, the GTA is recovering from the cyclical recession and employment growth is occurring in the new knowledge-based economy. After reviewing the longer-term social, economic and demographic forces that will shape growth in the GTA, there appears little reason to alter the magnitude of the future forecasts. The continuation of economic restructuring will weaken the short-term employment outlook and is likely to result in some reduction in levels of migration.

Over the long-term, however, we continue to believe that the GTA is well-positioned to participate in the emerging knowledge-based economy. The GTA continues to provide one of the highest quality urban living environments in the world with an economy that will be able to produce significant levels of employment over the long-term. As a result, growth is anticipated to continue.

Growth within the GTA will continue to be concentrated in the Regions surrounding Metro Toronto. There are strong demographic and economic reasons why this pattern is evolving. Policy and implementation programs will be required if this pattern is to be altered.

The GTA-wide forecasts are now to be used as input into the development of a Provincial growth management policy for the GTA. In addition, it was agreed that each of the Regions will prepare municipal forecasts, in conjunction with

their area municipalities, within the context of these forecasts. Monitoring of the forecast should be undertaken on a regular basis. However modifications to the forecasts based upon short term trends should be avoided. Changes should only be made in response to major events such as changes to federal immigration targets or the release of future census data.

